

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
RICHMOND DIVISION**

## **SPRINT'S FIRST AMENDED COMPLAINT<sup>1</sup>**

Plaintiff Sprint Communications Company L.P. complains as follows against Defendants Charter Communications, Inc. (“Charter Communications”), Charter Communications Holdings, LLC (“Charter Holdings”), Spectrum Management Holding Company LLC (“Spectrum Management”), Charter Communications Operating, LLC (“Charter Operating”), and Time Warner Cable, LLC (“Time Warner Cable”) (collectively, “Charter”).

## THE PARTIES

1. Plaintiff Sprint Communications Company L.P. ("Sprint") is a Limited Partnership organized and existing under the laws of the State of Delaware, with its principal place of business at 6200 Sprint Parkway, Overland Park, Kansas 66251.

<sup>1</sup> Sprint's First Amended Complaint is filed pursuant to Fed. R. Civ. P. 15(a)(2) and the Consent Order entered on August 16, 2018 (ECF No. 33). In light of the Consent Order, Sprint files its Amended Complaint in lieu of otherwise responding to Defendants' Motion to Dismiss Plaintiff's Complaint Pursuant to Rules 12(b)(3) and 12(b)(6) or in the Alternative to Transfer Pursuant to 28 U.S.C. § 1404 or § 1406.

2. On information and belief, defendant Charter Communications is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 400 Atlantic Street, Stamford, Connecticut 06901.

3. On information and belief, defendant Charter Holdings is a limited liability company organized and existing under the laws of the State of Delaware, with its principal place of business at 12405 Powerscourt Drive, St. Louis, Missouri 63131.

4. On information and belief, defendant Charter Operating is a limited liability company organized and existing under the laws of the State of Delaware, with its principal place of business at 12405 Powerscourt Drive, St. Louis, Missouri 63131.

5. On information and belief, defendant Spectrum Management is a limited liability company organized and existing under the laws of the State of Delaware, with its principal place of business at 12405 Powerscourt Drive, St. Louis, Missouri 63131.

6. On information and belief, defendant Time Warner Cable is a limited liability company organized and existing under the laws of the State of Delaware, with its principal place of business at 12405 Powerscourt Drive, St. Louis, Missouri 63131.

7. On information and belief, each defendant currently does or participates in providing and has previously provided or participated in providing video systems, products, and/or services, including Spectrum TV, the “Spectrum TV” application, SpectrumTV.com, TWC TV, Charter TV, “TWC TV,” TWCTV.com, and the “Charter TV” application, and other related products and services.

### **JURISDICTION**

8. This is an action for patent infringement under the United States Patent Laws, 35 U.S.C. § 271, *et. seq.* This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338.

9. This Court has personal jurisdiction over Charter Communications, Charter Holdings, Spectrum Management, Charter Operating, and Time Warner Cable because each does continuous and systematic business in this District, including by providing infringing products and services to the residents of the Eastern District of Virginia that each knew would be used within this District, and by soliciting business from the residents of the Eastern District of Virginia. For example, Charter has a regular and established place of business at its offices in the Eastern District of Virginia—including Time Warner Cable/Spectrum corporate offices at 13820 Sunrise Valley Drive Herndon, VA 20171 and numerous Charter/Spectrum properties such as those located at 107 N Main St, Franklin, VA, 23851, 216 Moore Ave, Suffolk, VA, 23434, 6743 Maddox Blvd #2, Chincoteague, VA, 23336—and elsewhere throughout the Eastern District of Virginia, such as where its network, equipment, personal property, and products are located and/or stored.<sup>2</sup> Charter also directly and through its agents regularly solicits, transacts, and does business in the State of Virginia and specifically in the Eastern District of Virginia, including through Spectrum branded TV products such as Spectrum TV, the “Spectrum TV” application, SpectrumTV.com, and legacy TWC and Charter branded TV products such as TWC TV, Charter TV, “TWC TV,” TWCTV.com, and the “Charter TV” application, which are made for, marketed, offered, and distributed to and used by users of Charter’s products and services in this Judicial District and throughout the State of Virginia.

10. Charter has committed and continues to commit acts of infringement in violation of 35 U.S.C. § 271, and has made, used, marketed, distributed, offered for sale, and/or sold

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<sup>2</sup> See e.g., <https://www.spectrum.com/browse/content/storelocator.html>; <https://www.spectrum.com/services/virginia>; <https://www.spectrum.com/cable-tv-service/virginia/norfolk>; <https://www.cabletv.com/time-warner/bundles>.

infringing products and services in the State of Virginia, including in the Eastern District of Virginia. For example, Charter has voluntarily and purposefully placed the Spectrum branded TV services and application in the stream of commerce with the expectation that this infringing product will be used in this Judicial District. Charter's infringing acts have caused and continue to cause injury to Sprint, including within this Judicial District.

**VENUE**

11. Venue is proper in this Court pursuant to 28 U.S.C. § 1400(b) because each Defendant transacts business within this Judicial District and has committed acts of infringement in this Judicial District. In addition, on information and belief, a substantial part of the events or omissions giving rise to these claims occurred in this District. Venue is also proper because each Defendant has committed acts of infringement in this District and has multiple regular and established places of business in this District.

12. For example, each Defendant has a regular and established place of business at its offices in the Eastern District of Virginia, including Time Warner Cable/Spectrum Management/Charter Communications/Charter Operating corporate offices at 13820 Sunrise Valley Drive Herndon, VA 20171 and numerous Charter Communications/Charter Operating/Charter Holding/Spectrum Management properties such as those located at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; and 6743 Maddox Blvd #2, Chincoteague, VA, 23336 , at the physical location of the network and elsewhere throughout the State of Virginia.<sup>3</sup>

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<sup>3</sup> See e.g., <https://www.spectrum.com/browse/content/storelocator.html>; <https://www.spectrum.com/services/virginia>; <https://www.spectrum.com/cable-tv-service/virginia/norfolk>; <https://www.cabletv.com/time-warner/bundles>.

### **Charter Communications**

13. On information and belief, Charter Communications has committed acts of infringement within the District and has regular and established places of business within the District, including at least at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; 6743 Maddox Blvd #2, Chincoteague, VA, 23336; 13820 Sunrise Valley Drive Herndon, VA 20171; and its physical network and Spectrum TV equipment located throughout the District.

14. Charter Communications is registered with the Commonwealth of Virginia to do business in Virginia, and lists an agent within the Eastern District of Virginia.

15. Charter Communications has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the accused services, including its Spectrum branded products, to residents in the Eastern District of Virginia. *See, e.g.*, Spectrum Services in Virginia, <https://www.spectrum.com/services/virginia> (last visited July 31, 2018); *Charter Communications, Operating, LLC et al. v. Verizon Communications et al.*, No. 08-cv-850 (E.D. Va.), D.I. 49 at ¶¶ 9, 11 (E.D. Va. Feb. 6, 2009) (“Charter admits that it develops, uses, sells, offers to sell, controls, directs and performs specific aspects of . . . cable television services in . . . Virginia. . . .” and “Admitted” that “venue is proper”); D.I. 26-3, Boglioli Decl, ¶ 12; *Charter Launches Spectrum TV App as a Channel on Roku Platform*, Charter Communications (Oct. 12, 2015), <https://newsroom.charter.com/press-releases/charter-launches-spectrum-tv-app-as-a-channel-on-roku-platform/> (last visted Aug. 6, 2018) (listing Virginia as a State Charter serves customers); Chris Welch, *Charter CEO threatens lawsuit over New York’s attempt to kick Spectrum out of the state*, The Verge (Aug. 1, 2018), <https://www.theverge.com/2018/8/1/17639976/charter-threat-new-york-lawsuit-spectrum>

(quoting Charter's CEO as stating “[W]e're operating in 41 states. We have thousands of franchise agreements.”)

See Spectrum Services in Virginia, <https://www.spectrum.com/services/virginia> (last visited Aug. 7, 2018).

16. On information or belief, Charter Communications has employees within the Eastern District of Virginia, including individuals whose work must be performed within the District. *See, e.g., Order Granting Approval of Transfer of Control, In re Time Warner Cable Inc., and Charter Communications, Inc.,* Case No. Puc-2015-00036 at 2 (“Va Corp. Commission, August 26, 2015) (“The Petitioners represent that ‘New Charter’ will retain the financial, managerial, and technical resources to render local exchange telecommunications services to Virginia customers through Charter Fiberlink and the TWC Subsidiaries . . . Upon review of the foregoing, the Staff believes that the Petitions have the financial, managerial, and technical resources . . . in Virginia and, therefore, the proposed Transfer appears . . . should be approved.”); Search Results for Charter Communications Employees, LinkedIn, [https://www.linkedin.com/search/results/people/?company=&facetCurrentCompany=%5B%224561%22%5D&facetGeoRegion=%5B%22us%3A97%22%5D&firstName=&lastName=&origin=FACETED\\_SEARCH&school=&title=](https://www.linkedin.com/search/results/people/?company=&facetCurrentCompany=%5B%224561%22%5D&facetGeoRegion=%5B%22us%3A97%22%5D&firstName=&lastName=&origin=FACETED_SEARCH&school=&title=) (last visited August, 9, 2018) (listing employees in the

Washington DC Metro area, including employees in Herndon, VA with titles including Director, Principal Engineer, Sr. Director, etc.); Principal Software Engineer at Charter Communications, LinkedIn,

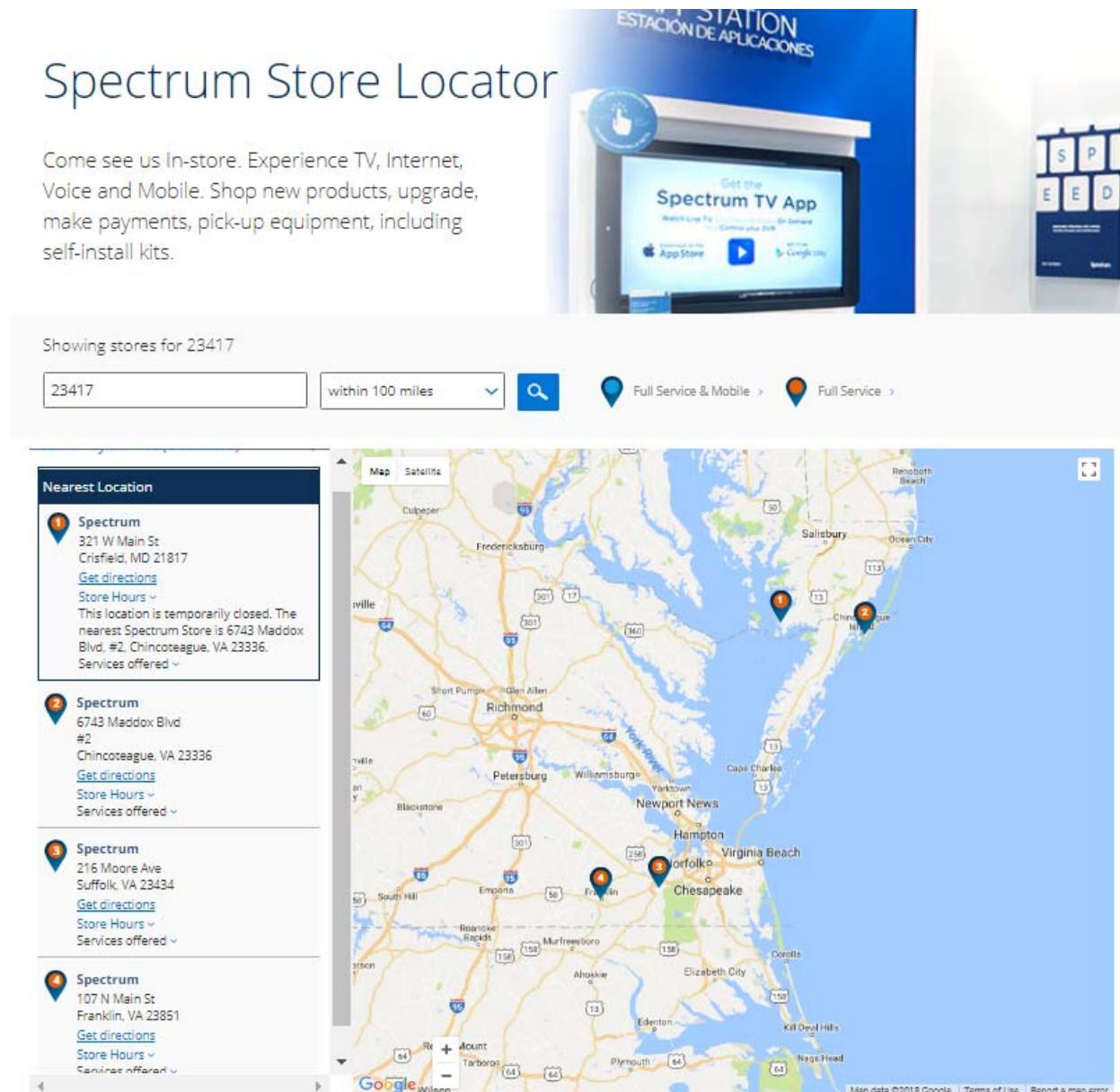
[https://www.linkedin.com/in/ptreszczotko/?lipi=urn%3Ali%3Apage%3Ad\\_flagship3\\_search\\_srp\\_people%3B3Qcz4rruQOjK35uRQVTZcA%3D%3D&licu=urn%3Ali%3Acontrol%3Ad\\_flagship3\\_search\\_srp\\_people-search\\_srp\\_result&lici=lRXcjVHpQWurrowrqKdOYQ%3D%3D](https://www.linkedin.com/in/ptreszczotko/?lipi=urn%3Ali%3Apage%3Ad_flagship3_search_srp_people%3B3Qcz4rruQOjK35uRQVTZcA%3D%3D&licu=urn%3Ali%3Acontrol%3Ad_flagship3_search_srp_people-search_srp_result&lici=lRXcjVHpQWurrowrqKdOYQ%3D%3D) (last visited Aug. 9, 2018). On information or belief, these employees employment relates to the accused infringing services, including making and/or offering for sale the “Spectrum TV” service.

17. As of August 6, 2018, Charter Communications advertised at least two (2) employment positions within the Eastern District of Virginia on its website. *See, e.g.*, <https://jobs.spectrum.com/job/suffolk/spectrum-retail-sales-associate/4673/8578421> (posted July 5, 2018). On information and belief, Charter Communications holds these positions out as employment positions with Charter Communications.

18. On information and belief, Charter Communication controls hiring of employees within the District. *See, e.g.*, <https://jobs.spectrum.com/job/suffolk/spectrum-retail-sales-associate/4673/8578421> (last visited Aug. 6, 2018) (“The Spectrum brand is powered and innovated by Charter Communications. . . . Charter Communications will consider for employment qualified applicants . . . .”).

19. Charter Communications holds itself out to the public as present in the Eastern District of Virginia at physical stores—including at least at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; and 6743 Maddox Blvd #2, Chincoteague, VA, 23336.

For example, Charter Communications depicts and lists on its website various physical facilities within the Eastern District of Virginia where it can be located:



The screenshot shows the Spectrum Store Locator website. At the top, there is a banner for the Spectrum TV App. Below the banner, the heading "Spectrum Store Locator" is displayed. A text block encourages users to visit in-store for TV, Internet, Voice, and Mobile services, mentioning new products, upgrades, payments, and self-install kits. The search interface includes a zip code input (23417), a radius dropdown (within 100 miles), a search button, and filters for "Full Service & Mobile" and "Full Service". The main content area shows a map of the Eastern District of Virginia with four store locations marked: 1. Spectrum 321 W Main St, Crisfield, MD 21817 (temporarily closed); 2. Spectrum 6743 Maddox Blvd, #2, Chincoteague, VA 23336; 3. Spectrum 216 Moore Ave, Suffolk, VA 23434; 4. Spectrum 107 N Main St, Franklin, VA 23851. Each listing includes a "Get directions" link, "Store Hours", and "Services offered".

See <https://www.spectrum.com/stores> (searching zip code 23417)

20. Charter Communications represents that to the public that individuals can “Shop new products, upgrade, make payments, pick-up equipment” at these Charter Communications

“full service” stores. *Id.* On information and belief, Charter Communications maintains products, promotional material, and equipment within these physical facilities.

21. On information and belief, stores within the District would not be able to relocate outside the District without approval from Charter Communications.

22. On information and belief, Charter Communication also places its signs at buildings within the District. For example, on information and belief, attached to the façade of and/or near the entrance to the parking lot for each of the buildings located at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; and 6743 Maddox Blvd #2, Chincoteague, VA, 23336 is a large sign that reads “Charter” and/or “Spectrum.” Thus, Charter Communications represents to the public that these are Charter Communication’s locations.

23. Charter Communications has ratified at least 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; and 6743 Maddox Blvd #2, Chincoteague, VA, 23336 as its places of business.

24. On information and belief, Charter Communications as the cause of action arose, and on May 16, 2018, Charter Communications occupied and employed individuals occupying 13820 Sunrise Valley Drive Herndon, VA 20171. *See, e.g.*, 2018 First Quarter Investor Update, Griffin Capital, (March 31, 2018) <https://www.griffincapital.com/documents/essential%20asset%20reit/marketing%20materials/investor%20kit/gcear-q1-2018-investor-update.pdf> (listing Charter Communications as located in Herndon, VA).

25. Charter Communications maintains financial, managerial, and technical resources within the Eastern District of Virginia. *See, e.g.*, Order Granting Approval of Transfer of

Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 2 (Va Corp. Commission, August 26, 2015).

26. Charter Communications via at least Charter Communications VI, LLC, enjoys cable franchise rights within the District, including at least within Suffolk, Southampton County, Franklin, and Windsor, and thus operates cable systems in such systems. *See, e.g.*, Cable Franchise Information, Suffolk, VA <https://www.suffolkva.us/229/Cable-Franchise-Information> (last visited Aug. 6, 2018); Item 8b - Charter Communications Franchise Agreement, City of Windsor, <https://www.windsor-va.gov/uploads/docs/Item%208b%20-%20Charter%20Communications%20Franchise%20Agreement.pdf> (last visited Aug. 6, 2018); Franchise Renewal Charter Communications, South Hampton Board of Supervisors (July 22, 2018), <http://www.southamptoncounty.org/MediaArchive/PDF/BOS%20AGENDA%20-%20JANUARY%202018/No.%2013%20-%20Franchise%20Renewal%20-%20Charter%20Communications.pdf> (last visited Aug. 6, 2018).

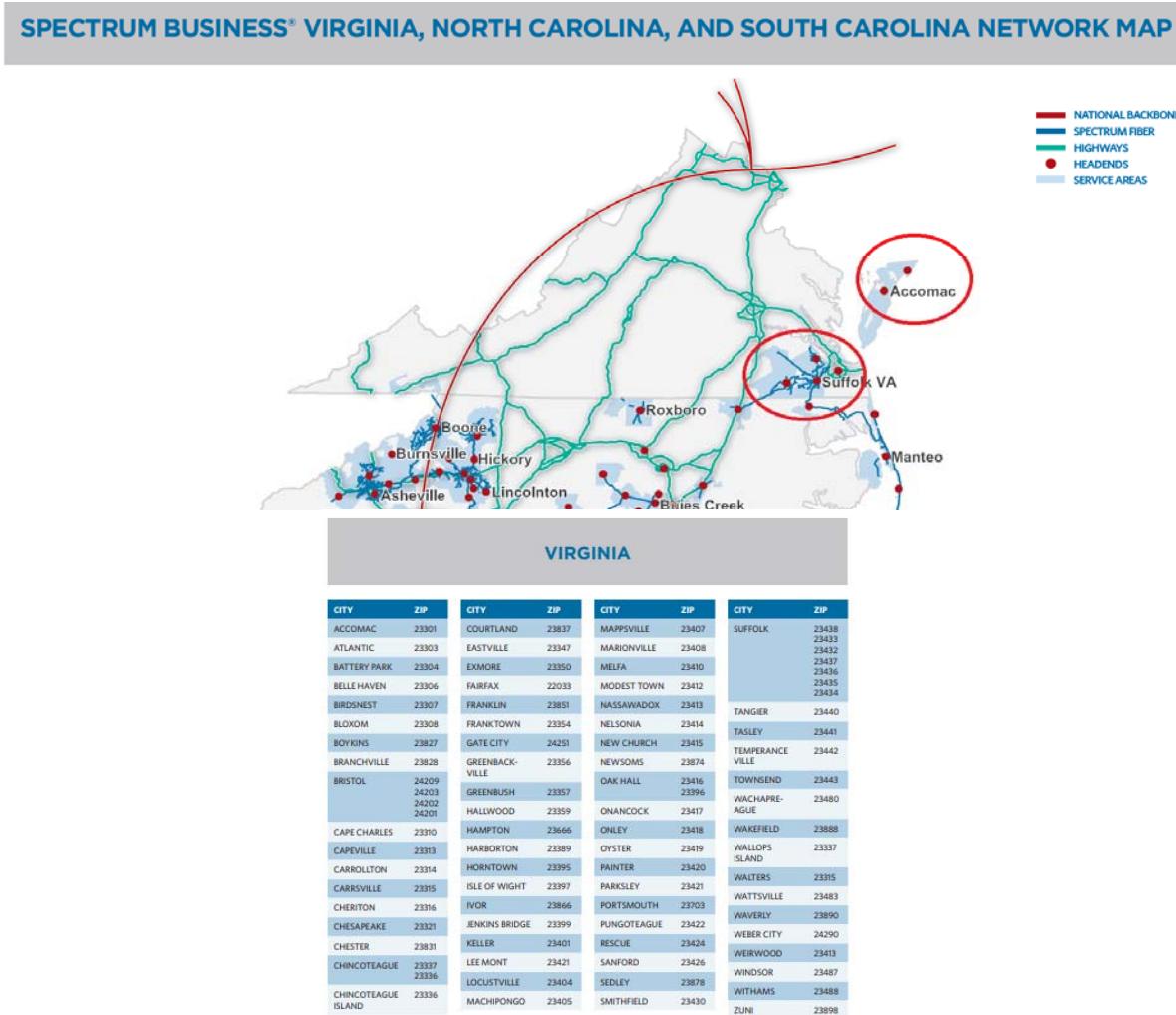
27. Upon information and belief, Charter Communications, controlling and acting as “Manager” of Charter Communications VII, LLC, entered cable franchise agreements with various localities, including at least the County of Southampton, Virginia. *See, e.g.*, Franchise Renewal Charter Communications, South Hampton Board of Supervisors, at 11 (July 22, 2018), <http://www.southamptoncounty.org/MediaArchive/PDF/BOS%20AGENDA%20-%20JANUARY%202018/No.%2013%20-%20Franchise%20Renewal%20-%20Charter%20Communications.pdf>. On information and belief, Charter Communications is also responsible for regulatory and reporting matters, complaints, and tariffs for any Virginia certificate. Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner*

*Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 16-17 (Va Corp. Commission, July 7, 2015).

28. On information and belief, in order to have the Commonwealth of Virginia approve aspects of the Charter-Time Warner Cable merger and asset realignment, Charter Communications represented to the Commonwealth of Virginia that it “will control the regulated companies in Virginia.” *See, e.g.*, Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 20 (Va Corp. Commission, July 7, 2015). Charter Communications also admitted it did and will continue to do business in Virginia. *Id.* at 1-2, 20; Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 3, 13-15 (Va Corp. Commission, July 7, 2015); *id.* at 4 (state that Charter Communication “operates in 28 states, including Virginia”); Discussion and Recommendation Re Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 2 (Va Corp. Commission, Aug. 19, 2015) (stating he Petitioners represent that [the merged companies] will retain the financial, managerial, and technical resources to render local exchange telecommunications services to Virginia customers . . . .”); Order Granting Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 2 (Va Corp. Commission, August 26, 2015.).

29. On information and belief Charter Communications likewise controls all debt and equity of all regulated companies in Virginia. Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 19-20 (Va Corp. Commission, July 7, 2015).

30. Charter Communications also represents to the public that it maintains its physical network, including accused network elements, within the Eastern District of Virginia:



*See* Spectrum Business, <https://sb.spectrum.com/mediacontent/pdfs/spectrum-business-south-carolina-north-carolina-virginia-KMA.pdf> (last visited 8/7/2018).

31. Charter Communications owns, operates, and/or controls a physical network located within the District, including owning, controlling, having rights to and/or maintaining such that it is present at TV Towers and other buildings in the District. *See, e.g.*, Charter Communications 2018 Annual Report (Form 10-K) at p. 26, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed Aug. 8, 2018) (“Our principal physical assets consist of cable distribution plant and equipment,

including signal receiving, encoding and decoding devices, headend reception facilities, distribution systems, and customer premise equipment for each of our cable systems. Our cable plant and related equipment are generally attached to utility poles under pole rental agreements with local public utilities and telephone companies, and in certain locations are buried in underground ducts or trenches. We own or lease real property for signal reception sites, and own our service vehicles. We generally lease space for business offices. Our headend and tower locations are located on owned or leased parcels of land, and we generally own the towers on which our equipment is located. The physical components of our cable systems require maintenance as well as periodic upgrades to support the new services and products we introduce.”); Accomack County Real Estate Land Book 2018, at 190, 3780 (April 16, 2018), <https://www.co.accomack.va.us/departments/real-estate-assessment/real-estate-land-book-2018>.

|   |   |   |
|---|---|---|
| TANGIER ISL TV CORP C/O CHARTER COMMUNICATIONS<br>ATTN: PROF TAX DEPT 12405 POWERSCT DR<br>ST LOUIS MO 63131-3674 | TV TOWER - BLDG ONLY<br>TV TOWER - BLDG ONLY<br>0                    100                    100 | 062A1A0000160B0<br>400                    0.64                    36133<br>REGULAR            DIST 11                    0.32                    0.32 |
|---|---|---|

|   |   |   |
|---|---|---|
| TANGIER ISL TV CORP C/O CHARTER COMMUNICATIONS<br>ATTN: PROF TAX DEPT 12405 POWERSCT DR<br>ST LOUIS MO 63131-3674 | TV TOWER - BLDG ONLY<br>TV TOWER - BLDG ONLY<br>0                    100                    100 | 062A1A0000160B0<br>400                    0.64                    36133<br>REGULAR            DIST 11                    0.32                    0.32 |
|---|---|---|

See Accomack County Real Estate Land Book 2018, at 190, 3780 (April 16, 2018), <https://www.co.accomack.va.us/departments/real-estate-assessment/real-estate-land-book-2018>.

32. Charter Communications owns, pays, and has paid taxes on personal property located in the Eastern District of Virginia. *See, e.g.*, Suffolk V.A. Tax, City of Suffolk, <https://www.suffolkvatx.us/#/WildfireSearch> (last visited August 3, 2018) (searching “charter communications”). Upon information and belief, at least some of the personal property is used in or to facilitate the accused infringing services. Upon information and belief, Charter Communications maintains vehicles in the Eastern District of Virginia.

**Suffolk**  
VIRGINIA  
*It's a good time to be in Suffolk.*

Treasurer    Commissioner of Revenue    Real Estate Assessor



*City of Suffolk - VA*

Search: charter communications

32 records returned

Search Tips: You can search for Names, Parcel IDs, Account Numbers (exclude leading zeros), and Street Names. Just start typing!

| Invoice   | Tax Year | Instl | Owner Name                         | Description | Record Type       | Due Date | Paid Date | Status  |
|-----------|----------|-------|------------------------------------|-------------|-------------------|----------|-----------|---|
| 366881710 | 2017     | 1     | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 12/05/17 | 05/08/18  | <span style="color:red">X</span> Unpaid <input type="button" value="Q View"/> |
| 51876     | 2018     | 1     | CHARTER COMMUNICATIONS HOLDINGS CO |             | DSO Fee           | 01/29/18 |           | <span style="color:red">X</span> Unpaid <input type="button" value="Q View"/> |
| 597881310 | 2013     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 08/13/14 | 07/18/14  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 597881410 | 2014     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 07/30/15 | 07/20/15  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 597881510 | 2015     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 12/07/15 | 11/16/15  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 597881610 | 2016     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 12/05/16 | 12/02/16  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 597881710 | 2017     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 01/17/18 | 06/08/18  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 51874     | 2018     | 1     | CHARTER COMMUNICATIONS LLC         |             | DSO Fee           | 01/29/18 | 06/08/18  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 900175    | 2017     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 07/10/18 | 06/08/18  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 300048    | 2017     | 1     | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 08/20/18 | 08/02/18  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 164511311 | 2013     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/06/13 | 11/29/13  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 164511411 | 2014     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/07/14 | 11/21/14  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 164511511 | 2015     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/07/15 | 11/19/15  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 164511611 | 2016     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/05/16 | 11/23/16  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 164511711 | 2017     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/05/17 | 11/20/17  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 470321310 | 2013     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/06/13 | 11/26/13  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 470321410 | 2014     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/07/14 | 11/19/14  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |
| 470321510 | 2015     | 1     | CHARTER COMMUNICATIONS VILLCO      |             | Personal Property | 12/07/15 | 11/16/15  | <span style="color:green">✓</span> Paid <input type="button" value="Q View"/> |

1 Previous   Next

| Invoice   | Tax Year | Instat | Owner Name                         | Description | Record Type       | Due Date | Paid Date | Status |
|-----------|----------|--------|------------------------------------|-------------|-------------------|----------|-----------|--------|
| 4/0321810 | 2016     | 1      | CHARTER COMMUNICATIONS VI LLC      |             | Personal Property | 12/05/16 | 11/23/16  | ✓ Paid |
| 4/0321710 | 2017     | 1      | CHARTER COMMUNICATIONS VI LLC      |             | Personal Property | 12/05/17 | 11/23/17  | ✓ Paid |
| 356681310 | 2013     | 1      | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/23/14 | 06/06/14  | ✓ Paid |
| 356681410 | 2014     | 1      | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/23/15 | 06/05/15  | ✓ Paid |
| 356681510 | 2015     | 1      | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/04/16 | 06/11/16  | ✓ Paid |
| 356681610 | 2016     | 1      | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/05/17 | 06/12/17  | ✓ Paid |
| 356681310 | 2013     | 1      | CHARTER COMMUNICATIONS INC         |             | Personal Property | 06/23/14 | 06/19/14  | ✓ Paid |
| 356681410 | 2014     | 1      | CHARTER COMMUNICATIONS INC         |             | Personal Property | 06/23/15 | 06/20/15  | ✓ Paid |
| 356681510 | 2015     | 1      | CHARTER COMMUNICATIONS INC         |             | Personal Property | 12/07/15 | 11/16/15  | ✓ Paid |
| 356681610 | 2016     | 1      | CHARTER COMMUNICATIONS INC         |             | Personal Property | 12/05/16 | 12/02/16  | ✓ Paid |

See Suffolk V.A. Tax, City of Suffolk, <https://www.suffolkvatx.us/#/WildfireSearch> (last visited August 3, 2018) (searching “charter communications”).

33. Thus, Charter Communications has a regular and established place of business within the District and should be treated as such.

### **Charter Holdings**

34. On information and belief, Charter Holdings has committed acts of infringement within the District and has regular and established places of business within the District, including at least at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; 6743 Maddox Blvd #2, Chincoteague, VA, 23336, and its physical network and Spectrum TV equipment located throughout the District.

35. Charter Holdings is registered with the Commonwealth of Virginia to do business in Virginia, and lists an agent within the Eastern District of Virginia.

36. Charter Holdings has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the accused services, including its Spectrum branded products, to residents in the Eastern District of Virginia. *See, e.g.*, Spectrum Services in Virginia, <https://www.spectrum.com/services/virginia> (last visited July 31, 2018); D.I. 26-3, Boglioli Decl., ¶ 12; *Charter Launches Spectrum TV App as a Channel on Roku Platform*, Charter Communications (Oct. 12, 2015), <https://newsroom.charter.com/press-releases/charter-launches-spectrum-tv-app-as-a-channel-on-roku-platform/> (last visted Aug. 6, 2018) (listing Virginia as a State Charter serves customers); Chris Welch, *Charter CEO threatens lawsuit over New York's attempt to kick Spectrum out of the state*, The Verge (Aug. 1, 2018), <https://www.theverge.com/2018/8/1/17639976/charter-threat-new-york-lawsuit-spectrum> (quoting Charter's CEO as stating “[W]e're operating in 41 states. We have thousands of franchise agreements.”).

37. On information and belief, Charter Holdings owns cable systems located within the District. *See, e.g.*, Charter Communications 2018 Annual Report (Form 10-K) at p. F-26,

<http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed Aug. 8, 2018).

38. On information and belief, physical stores and cable systems within the District would not be able to be relocate outside the District without approval from Charter Holdings.

39. On information and belief, Charter Holdings also places its signs at buildings within the District. For example, on information and belief, attached to the façade of and/or near the entrance to the parking lot for each of the buildings located at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; and 6743 Maddox Blvd #2, Chincoteague, VA, 23336 is a large sign that reads “Charter” and/or “Spectrum.”

40. On information and belief, Charter Holdings owns, pays, and has paid taxes on personal property located in the Eastern District of Virginia. *See, e.g.*, Suffolk V.A. Tax, City of Suffolk, <https://www.suffolkvatx.us/#/WildfireSearch> (last visited August 3, 2018) (searching “charter communications”). On information and belief, at least some of the personal property is used in or to facilitate the accused infringing services.

**Treasurer** • **Commissioner of Revenue** • **Real Estate Assessor**

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**City of Suffolk - VA**

**Search**

charter communications

30 records returned

**Search Tips**  
You can search for Names, Parcel IDs, Account Numbers (exclude leading zeros), and Street Names. Just start typing!

1 2

| Invoice   | Tax Year | Inst | Owner Name                         | Description | Record Type       | Due Date | Paid Date | Status | <input type="button" value="View"/> |
|-----------|----------|------|------------------------------------|-------------|-------------------|----------|-----------|--------|-------------------------------------|
| 355881710 | 2017     | 1    | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 12/05/17 | 05/08/18  | Unpaid | <input type="button" value="View"/> |
| 51876     | 2018     | 1    | CHARTER COMMUNICATIONS HOLDINGS CO |             | DSO Fee           | 01/29/18 |           | Unpaid | <input type="button" value="View"/> |
| 355811710 | 2017     | 1    | CHARTER COMMUNICATIONS INC         |             | Personal Property | 12/05/17 | 09/28/17  | Unpaid | <input type="button" value="View"/> |
| 51876     | 2018     | 1    | CHARTER COMMUNICATIONS INC         |             | DSO Fee           | 01/29/18 |           | Unpaid | <input type="button" value="View"/> |
| 597881310 | 2013     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 08/13/14 | 07/18/14  | Paid   | <input type="button" value="View"/> |
| 597881410 | 2014     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 07/30/15 | 07/20/15  | Paid   | <input type="button" value="View"/> |
| 597881510 | 2015     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 12/07/15 | 11/16/15  | Paid   | <input type="button" value="View"/> |
| 597881610 | 2016     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 12/05/16 | 12/02/16  | Paid   | <input type="button" value="View"/> |
| 597881710 | 2017     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 01/17/18 | 06/08/18  | Paid   | <input type="button" value="View"/> |
| 51874     | 2018     | 1    | CHARTER COMMUNICATIONS LLC         |             | DSO Fee           | 01/29/18 | 06/08/18  | Paid   | <input type="button" value="View"/> |
| 900175    | 2017     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 07/10/18 | 06/08/18  | Paid   | <input type="button" value="View"/> |
| 800348    | 2017     | 1    | CHARTER COMMUNICATIONS LLC         |             | Personal Property | 06/29/18 | 06/02/18  | Paid   | <input type="button" value="View"/> |
| 164511311 | 2013     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/05/13 | 11/29/13  | Paid   | <input type="button" value="View"/> |
| 164511411 | 2014     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/07/14 | 11/21/14  | Paid   | <input type="button" value="View"/> |
| 164511511 | 2015     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/07/15 | 11/19/15  | Paid   | <input type="button" value="View"/> |
| 164511611 | 2016     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/05/16 | 11/23/16  | Paid   | <input type="button" value="View"/> |
| 164511711 | 2017     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/05/17 | 11/20/17  | Paid   | <input type="button" value="View"/> |
| 470321310 | 2013     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/05/13 | 11/26/13  | Paid   | <input type="button" value="View"/> |
| 470321410 | 2014     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/07/14 | 11/18/14  | Paid   | <input type="button" value="View"/> |
| 470321510 | 2015     | 1    | CHARTER COMMUNICATIONS VII LLC     |             | Personal Property | 12/07/15 | 11/16/15  | Paid   | <input type="button" value="View"/> |

1 2

**Suffolk**  
VIRGINIA  
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Treasurer - Commissioner of Revenue - Real Estate Assessor



*City of Suffolk - VA*

Search: charter communications

Search Tips: You can search for Names, Parcel IDs, Account Numbers (exclude leading zeros), and Street Names. Just start typing!

30 records returned ① Previous 1 2 ② Next

|  | Invoice   | Tax Year | Inst | Owner Name                         | Description | Record Type       | Due Date | Paid Date | Status                                       |
|--|-----------|----------|------|------------------------------------|-------------|-------------------|----------|-----------|--|
| <b>Status</b>  | 470321810 | 2016     | 1    | CHARTER COMMUNICATIONS VILLC       |             | Personal Property | 12/05/16 | 11/23/16  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>Unpaid</b> (4)             | 470321710 | 2017     | 1    | CHARTER COMMUNICATIONS VILLC       |             | Personal Property | 12/05/17 | 11/29/17  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>Paid</b> (26)              | 355881310 | 2013     | 1    | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/23/14 | 06/06/14  | ✓ Paid <input type="button" value="Q View"/> |
| <b>Installment</b>                                     | 355881410 | 2014     | 1    | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/25/15 | 06/05/15  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>1 (30)</b>                 | 355881510 | 2015     | 1    | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 06/04/16 | 06/11/16  | ✓ Paid <input type="button" value="Q View"/> |
| <b>Type</b>  | 355881810 | 2016     | 1    | CHARTER COMMUNICATIONS HOLDINGS CO |             | Personal Property | 08/09/17 | 08/12/17  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>Personal Property</b> (30) | 355881310 | 2013     | 1    | CHARTER COMMUNICATIONS INC         |             | Personal Property | 09/25/14 | 08/19/14  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>2018</b> (3)               | 355881410 | 2014     | 1    | CHARTER COMMUNICATIONS INC         |             | Personal Property | 07/30/15 | 07/20/15  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>2017</b> (7)               | 355881510 | 2015     | 1    | CHARTER COMMUNICATIONS INC         |             | Personal Property | 12/07/15 | 11/16/15  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>2016</b> (5)               | 355881810 | 2016     | 1    | CHARTER COMMUNICATIONS INC         |             | Personal Property | 12/05/16 | 12/02/16  | ✓ Paid <input type="button" value="Q View"/> |
| <input type="checkbox"/> <b>2015</b> (5)               |           |          |      |                                    |             |                   |          |           |  |
| <input type="checkbox"/> <b>2014</b> (5)               |           |          |      |                                    |             |                   |          |           |  |
| <input type="checkbox"/> <b>2013</b> (5)               |           |          |      |                                    |             |                   |          |           |  |

① Previous 1 2 ② Next

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See Suffolk V.A. Tax, City of Suffolk, <https://www.suffolkvatx.us/#/WildfireSearch> (last visited August 3, 2018) (searching “charter communications”).

### **Charter Operating**

41. On information and belief, Charter Operating has committed acts of infringement within the District and has regular and established places of business within the District, including at least at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; 6743 Maddox Blvd #2, Chincoteague, VA, 23336; and its physical network and Spectrum TV equipment located throughout the District.

42. Charter Operating is registered with the Commonwealth of Virginia to do business in Virginia, and lists an agent within the Eastern District of Virginia.

43. Charter Operating has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the accused services, including its Spectrum branded products, to residents in the Eastern District of Virginia. *See, e.g.*, Spectrum Services in Virginia, <https://www.spectrum.com/services/virginia> (last visited July 31, 2018); *Charter Communications, Operating, LLC et al. v. Verizon Communications et al.*, No. 08-cv-850 (E.D. Va.), D.I. 49 at ¶¶ 9, 11 (E.D. Va. Feb. 6, 2009) (“Charter admits that it develops, uses, sells, offers to sell, controls, directs and performs specific aspects of . . . cable television services in . . . Virginia. . . .” and “Admitted” that “venue is proper”); D.I. 26-3, Boglioli Decl., ¶ 12; *Charter Launches Spectrum TV App as a Channel on Roku Platform*, Charter Communications (Oct. 12, 2015), <https://newsroom.charter.com/press-releases/charter-launches-spectrum-tv-app-as-a-channel-on-roku-platform/> (last visted Aug. 6, 2018) (listing Virginia as a State Charter serves customers); Chris Welch, *Charter CEO threatens lawsuit over New York’s attempt to kick Spectrum out of the state*, The Verge (Aug. 1, 2018), <https://www.theverge.com/2018/8/1/17639976/charter-threat-new-york-lawsuit-spectrum>

(quoting Charter's CEO as stating “[W]e're operating in 41 states. We have thousands of franchise agreements.”).

44. Charter Operating provides the “Spectrum TV” application and lists itself as seller. Spectrum TV, Apple App Store, <https://itunes.apple.com/us/app/spectrum-tv/id420455839?mt=8> (listing Charter Operating as Developer/Seller) (last visited Aug. 14, 2018). Upon information and belief, the “Spectrum TV” application has been made, used, offered for sale, and/or sold, and continues to be made, used, offered for sale, and/or sold within the Eastern District of Virginia. Upon information and belief, Charter Operating represents that its website is the same as each other Defendant.

45. Charter Operating has previously admitted that venue was proper in the Eastern District of Virginia. *Charter Communications, Operating, LLC et al. v. Verizon Communications et al.*, No. 08-cv-850 (E.D. Va.), D.I. 49 at ¶¶ 9, 11 (E.D. Va. Feb. 6, 2009).

46. On information or belief, Charter Operating has employees within the Eastern District of Virginia, including individuals whose work must be performed within the District.

47. On information and belief, Charter Operating operates the cable systems located within the District. *See, e.g.*, Charter Communications 2018 Annual Report (Form 10-K) at p. F-9, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed Aug. 8, 2018) (noting “substantially all of the operations reside” under Charter Operating’s control).

48. On information and belief, Charter Operating owns equipment, facilities, and systems within the District, or should be treated as such because said equipment, facilities, and systems are provided on behalf of Charter Operating. 2017 FCC Interstate Access Tariff No. 1, at 16 (July 25, 2017),

<https://www.spectrum.com/content/dam/spectrum/residential/en/pdfs/policies/tt/TT%20FCC%20Interstate%20Access%20Tariff.pdf>.

49. On information and belief, Charter Operating maintains products, promotional material, and equipment within in the Eastern District of Virginia at physical stores—including at least at 107 N Main St, Franklin, VA, 23851; 216 Moore Ave, Suffolk, VA, 23434; and 6743 Maddox Blvd #2, Chincoteague, VA, 23336.

50. On information and belief, physical stores and cable systems within the District would not be able to be relocate outside the District without approval from Charter Operating.

51. Charter Operating identifies itself as being a “Cable TV provider of local exchange” in Virginia. Charter Operating FCC Form 499 Registration Number 0002526580, FCC Form 499 Filer Database (April 2, 2018), <http://apps.fcc.gov/cgb/form499/499detail.cfm?FilerNum=832346> (listing “Virginia”).

52. On information and belief, Charter Operating has issued notes secured, *inter alia*, in its assets in Virginia. *See* Charter Communications 2018 Annual Report (Form 10-K) at p. F-22, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed Aug. 8, 2018).

53. Thus, Charter Operating has a regular and established place of business within the District and should be treated as such.

### **Time Warner Cable**

54. On information and belief, Time Warner Cable has committed acts of infringement within the District and has regular and established places of business within the District, including at least at 13820 Sunrise Valley Drive Herndon, VA 20171, and its physical network and TV equipment located throughout the District.

55. Time Warner Cable has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the accused services, including its TWC and Spectrum branded products, to residents in the Eastern District of Virginia. *See, e.g.*, Spectrum Services in Virginia, <https://www.spectrum.com/services/virginia> (last visited July 31, 2018); *Fan TV Coming To Time Warner Cable Subscribers Nationwide*, Time Warner Cable (April 22, 2014), <https://www.timewarnercable.com/en/about-us/press/fan-tv-coming-to-twc-subscribers-nationwide.html> (listing Virginia); *Time Warner Cable Bundles in Virginia*, CableTV (captured Sept. 5, 2014) <https://web.archive.org/web/20140905092540/http://www.cabletv.com:80/time-warner/va>.

56. Time Warner Cable previously offered the TWC TV application within Virginia. TWC TV, Apple App Store, <https://web.archive.org/web/20141031041258/https://itunes.apple.com/us/app/twc-tv/id420455839?mt=8> (captured Oct. 31, 2014). On information and belief, the TWC TV application was used within the District.

57. On information and belief, Time Warner Cable continuously leased, maintained, occupied, and/or had employees occupying multiple offices in the District after it began offering the infringing services, including at least 13820 Sunrise Valley Drive Herndon, VA 20171 and 2551 Dulles View Dr, Herndon, VA 20171. *See, e.g.*, Time Warner Regional Network Operations Center, Griffin Capital, <https://www.griffincapital.com/griffin-capital-essential-asset-reit/property-portfolio/time-warner> (last visited Aug. 6, 2018).

58. Time Warner Cable's lease at 13820 Sunrise Valley Drive Herndon, VA 20171 was originally to run through 2019. Supp. No. 10 to Wells Core Office Income REIT, Inc. Prospectus, (March 22, 2012), <https://www.sec.gov/Archives/edgar/data/1256069/000125606912000021/supplementno11->

southlakeac.htm. On information and belief, Time Warner Cable maintained a regular and established places of business in Herndon, VA on or shortly before May 16, 2018.

59. For example, on information or belief, Time Warner Cable has and had employees within the Eastern District of Virginia, as of the filing of the complaint, including at 13820 Sunrise Valley Drive Herndon, VA 20171. *See, e.g.*, Spectrum Reviews: Information Security Engineer (Former Employee) - Herndon, VA, , Indeed (June 5, 2018), <https://www.indeed.com/cmp/Spectrum-1/reviews?id=27dc460ff8d030b6>; Spectrum Reviews: Senior Analyst, Technical (Commercial Operations) (Current Employee) - Herndon, VA, Indeed (May 15, 2018), <https://www.indeed.com/cmp/Spectrum-1/reviews?id=5775e5dde1f1e033>; Spectrum Reviews: NOC Technician (Former Employee) - Herndon, VA, Indeed (April 7, 2018), <https://www.indeed.com/cmp/Spectrum-1/reviews?id=a1004c36f8b10f5c>; Time Warner Cable/Charter Reviews: ORDER MANAGEMENT SPECIALIST (Former Employee) - Dulles, VA, Indeed (May 22, 2018), <https://www.indeed.com/cmp/Time-Warner-Cable-Charter/reviews?id=ca7e7e1e83b0fc41>; TWC/Spectrum Reviews: NOC MANAGER IN St. Louis, MO (Former Employee) - Herndon, VA, Indeed (May 24, 2018), <https://www.indeed.com/cmp/Twc-Spectrum/reviews?id=d2baf0f21da532b5>; Search Results for Time Warner Cable Employees, LinkedIn, [\(last visited August, 7, 2018\) \(listing employees in the Washington DC Metro area, including employees in Herndon, VA with titles including Director, National Order Management – Partner Channel, Sr. Director Phone Operations, Systems Engineer \(in which he had “24/7 Operations responsibility for back end systems to Time Warner Cable's mobile \(Android/iOS\) applications”](https://www.linkedin.com/search/results/people/?company=&facetCurrentCompany=%5B%222031%22%5D&facetGeoRegion=%5B%22us%3A97%22%5D&firstName=&lastName=&origin=FACETED_SEARCH&school=&title=)

such as “cable entertainment channels (TWC TV”), Principal Engineer, Principal Engineer, ATG OSS, NOC Metric Analyst, Director, Principal Engineer, etc.).

60. On information and belief, Time Warner Cable maintains products, promotional material, and equipment within in the Eastern District of Virginia.

61. On information and belief, Charter Communications and Time Warner Cable represented to the Commonwealth of Virginia that following the merger, they would continue to maintain employees and equipment necessary to provide reliable services in Virginia in order to be granted approval of transfer of control of various assets. *See, e.g.*, Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 3 (Va Corp. Commission, July 7, 2015) (stating Charter “will have the requisite financial, technical, and managerial qualifications to continue to provide reliable service in Virginia . . . through the TWC Subsidiaries.”); Discussion and Recommendation Re Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036 at 2 (Va Corp. Commission, Aug. 19, 2015) (stating the “Petitioners represent that [the merged companies] will retain the financial, managerial, and technical resources to render local exchange telecommunications services to Virginia customers through . . . the TWC Subsidiaries . . . .”); Order Granting Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036 at 2 (Va Corp. Commission, August 26, 2015).

62. Time Warner Cable admitted that it “delivers high-quality video, broadband, and voice services, reaching over 15 million residential and business customers across 30 states, including Virginia.” Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc.*,

*and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 6 (Va Corp. Commission, July 7, 2015).

63. On information and belief, Time Warner Cable was/is also responsible for regulatory and reporting matters, complaints, and tariffs for various Virginia certificate. Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 16-17 (Va Corp. Commission, July 7, 2015).

### **Spectrum Management**

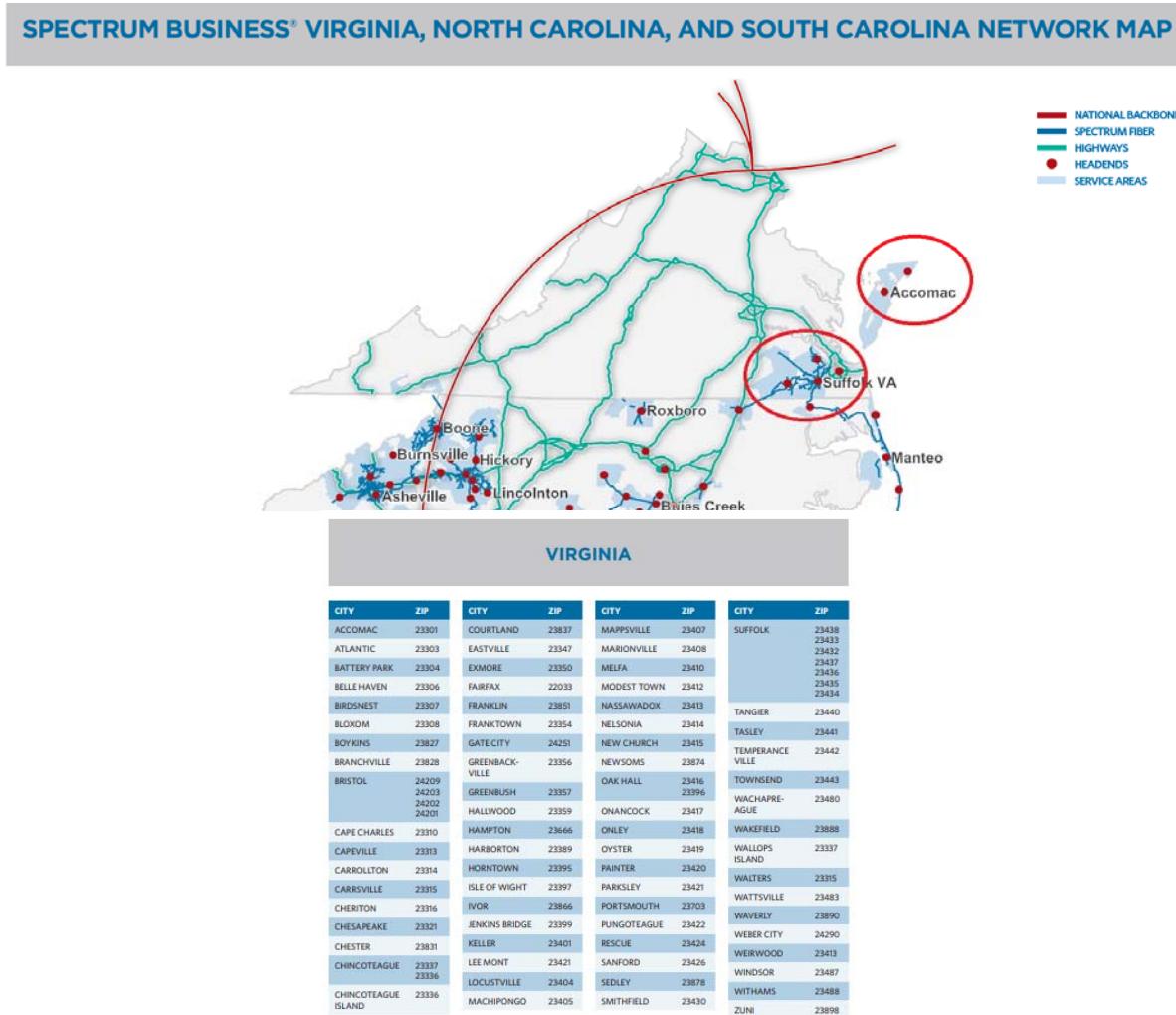
64. On information and belief, Spectrum Management has committed acts of infringement within the District and has regular and established places of business within the District, including at least at 13820 Sunrise Valley Drive Herndon, VA 20171, and its physical network located throughout the District.

65. Spectrum Management has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the accused services, including its TWC and Spectrum branded products, to residents in the Eastern District of Virginia. *See, e.g.*, Spectrum Services in Virginia, <https://www.spectrum.com/services/virginia> (last visited July 31, 2018); Fan TV Coming To Time Warner Cable Subscribers Nationwide, Time Warner Cable (April 22, 2014), <https://www.timewarnercable.com/en/about-us/press/fan-tv-coming-to-twc-subscribers-nationwide.html> (listing Virginia); Time Warner Cable Bundles in Virginia, CableTV (captured Sept. 5, 2014) <https://web.archive.org/web/20140905092540/http://www.cabletv.com:80/time-warner/va>.

66. Spectrum Management previously offered the TWC TV application within Virginia. TWC TV, Apple App Store, <https://web.archive.org/web/20141031041258/https://>

itunes.apple.com/us/app/twc-tv/id420455839?mt=8 (captured Oct. 31, 2014). On information and belief, the TWC TV application was used within the District

67. Spectrum Management represents to the public that it maintains its physical network within the Eastern District of Virginia:



See <https://sb.spectrum.com/mediacontent/pdfs/spectrum-business-south-carolina-north-carolina-virginia-KMA.pdf>

68. On information and belief, Spectrum Management continuously leased, maintained, occupied, and/or had employees occupying multiple offices in the District after it began offering the infringing services, including at least at 13820 Sunrise Valley Drive Herndon, VA 20171 and 2551 Dulles View Dr, Herndon, VA 20171. See, e.g., Time Warner Regional

Network Operations Center, Griffin Capital, <https://www.griffincapital.com/griffin-capital-essential-asset-reit/property-portfolio/time-warner> (last visited Aug. 6, 2018).

69. Spectrum Management's lease at 13820 Sunrise Valley Drive Herndon, VA 20171 was originally to run through 2019. Supp. No. 10 to Wells Core Office Income REIT, Inc. Prospectus, (March 22, 2012), <https://www.sec.gov/Archives/edgar/data/1256069/000125606912000021/supplementno11-southlakeac.htm>. On information and belief, Spectrum Management maintained a regular and established places of business in Herndon, VA on or shortly before May 16, 2018.

70. For example, on information or belief, Spectrum Management has and had employees within the Eastern District of Virginia, as of the filing of the complaint, including at 13820 Sunrise Valley Drive Herndon, VA 20171. *See, e.g.*, Spectrum Reviews: Information Security Engineer (Former Employee) - Herndon, VA, , Indeed (June 5, 2018), <https://www.indeed.com/cmp/Spectrum-1/reviews?id=27dc460ff8d030b6>; Spectrum Reviews: Senior Analyst, Technical (Commercial Operations) (Current Employee) - Herndon, VA, Indeed (May 15, 2018), <https://www.indeed.com/cmp/Spectrum-1/reviews?id=5775e5dde1f1e033>; Spectrum Reviews: NOC Technician (Former Employee) - Herndon, VA, Indeed (April 7, 2018), <https://www.indeed.com/cmp/Spectrum-1/reviews?id=a1004c36f8b10f5c>; Time Warner Cable/Charter Reviews: ORDER MANAGEMENT SPECIALIST (Former Employee) - Dulles, VA, Indeed (May 22, 2018), <https://www.indeed.com/cmp/Time-Warner-Cable-Charter/reviews?id=ca7e7e1e83b0fc41>; TWC/Spectrum Reviews: NOC MANAGER IN St. Louis, MO (Former Employee) - Herndon, VA, Indeed (May 24, 2018), <https://www.indeed.com/cmp/Twc-Spectrum/reviews?id=d2baf0f21da532b5>; Search Results for Time Warner Cable Employees, LinkedIn, <https://www.linkedin.com/search/results/people>

/?company=&facetCurrentCompany=%5B%222031%22%5D&facetGeoRegion=%5B%22us%3A97%22%5D&firstName=&lastName=&origin=FACETED\_SEARCH&school=&title= (last visited August, 7, 2018) ((listing employees in the Washington DC Metro area, including employees in Herndon, VA with titles including Director, National Order Management – Partner Channel, Sr. Director Phone Operations, Systems Engineer (in which he had “24/7 Operations responsibility for back end systems to Time Warner Cable's mobile (Android/iOS) applications” such as “cable entertainment channels (TWC TV)”), Principal Engineer, Principal Engineer, ATG OSS, NOC Metric Analyst, Director, Principal Engineer, etc.).

71. Spectrum Management’s predecessor admitted that it “delivers high-quality video, broadband, and voice services, reaching over 15 million residential and business customers across 30 states, including Virginia.” Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 6 (Va Corp. Commission, July 7, 2015).

72. On information and belief, Spectrum Management maintains products, promotional material, and equipment within in the Eastern District of Virginia.

73. Charter Communications and Spectrum Management’s predecessor represented to the Commonwealth of Virginia that following the merger, they would continue to maintain employees and equipment necessary to provide reliable services in Virginia in order to be granted approval of transfer of control of various assets. *See, e.g.*, Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 3 (Va Corp. Commission, July 7, 2015) (stating Charter “will have the requisite financial, technical, and managerial qualifications to continue to provide reliable service in Virginia . . . through the TWC Subsidiaries.”); Discussion and Recommendation Re

Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 2 (Va Corp. Commission, Aug. 19, 2015) (stating the “Petitioners represent that [the merged companies] will retain the financial, managerial, and technical resources to render local exchange telecommunications services to Virginia customers through . . . the TWC Subsidiaries . . .”); Order Granting Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 2 (Va Corp. Commission, August 26, 2015).

74. On information and belief, Spectrum Management was/is also responsible for regulatory and reporting matters, complaints, and tariffs for various Virginia certificate. Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 16-17 (Va Corp. Commission, July 7, 2015).

### **Charter Entities**

75. Charter Communications on behalf of itself and the other Charter entities, represents to the public, in corporate filings, that it is a unified company with a national footprint. Charter Communications 2018 Annual Report, at p. 5, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “Annual Report” (last accessed Aug. 8, 2018) (stating it as has new unified pricing, packaging, and branding, “across our national footprint . . . under one powerful brand we call, Spectrum”).

76. On information and belief, Defendants do not dispute they have a regular and established places of business at locations they own and/or lease via a related holding company also controlled by Charter Communications. For example, on information and belief, even at their admitted shared principal place of business at 12405 Powerscourt Drive, St. Louis, Missouri

63131, Spectrum Management, Charter Holdings, Charter Operating, and Time Warner Cable only own and/or lease via a related Charter entity.

77. On information and belief, Defendants generally maintain wholly owned and controlled subsidiaries to own and/or lease property which it occupies. For example, on information and belief, Charter Entities own/lease property at their respective headquarters via a subsidiary. On information and belief, such subsidiaries do not maintain separate financial statements in the regular course of business.

78. On information and belief, Charter Communications, Charter Operating, and its Virginia and other regional subsidiaries have disregarded any formal corporate separation. On information and belief, Charter Communications and the Virginia subsidiaries combine their financial statements, share directors and officers, and do not maintain separate finances or assets. Charter Communications specifically represented to the Commonwealth of Virginia that it operated in Virginia through a Virginia subsidiary. Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 6 (Va Corp. Commission, July 7, 2015). For example, Charter Communications represented to the Commonwealth of Virginia that it “provides competitive carrier services in Virginia via its subsidiary . . . providing service in over 40 Virginia communities,” including several in this District such as in “Accomac, Eastville, Onancock, Belle Haven, Hallwood, Parksley and Suffolk.” *Id.* at 6. Charter Communications made no distinction between itself and its subsidiaries when it sought approval from the Commonwealth of Virginia for its merger with Time Warner Cable, Inc. For example, Charter Communications represented to the Commonwealth of Virginia that it would “have the requisite financial, technical, and managerial qualifications to continue to provide reliable service in Virginia through . . . Subsidiaries.” *Id.* at

3. It also emphasized that Virginia customers would benefit directly from the managerial, technological, and business experience of Charter Communications employees (and employees of the former Time Warner and Bright House parent companies). *Id.* at 12-13. Charter Communications stated that it would “utilize Charter’s, TWC’s and BHN’s significant managerial capability and experience as top-tier communications service providers, which will benefit . . . Virginia customers.” *Id.* at 13. Charter further specifically represented to the Commonwealth of Virginia that “[b]ecause New Charter will control the regulated companies in Virginia after the Transaction, it will control their access to financial and capital markets[,]” and would control their “debt and equity financing[.]” *Id.* at 19. As further evidence that Charter Communications and the subsidiaries have disregarded any formal corporate separation, the subsidiaries were forced to become guarantors of, and pledge their assets to secure, indebtedness incurred to finance the Charter/Time Warner Cable merger. Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at Ex. B 2-3 (Va Corp. Commission, July 7, 2015). Charter Operating, was also required to guarantee billions of dollars in Time Warner Cable indebtedness. Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at Ex. B p. 7, 9 (Va Corp. Commission, July 7, 2015). In approving the merger, the Commonwealth of Virginia relied on the representations that Charter Communications would “have the financial, managerial, and technical resources to render telecommunications services to Virginia customers.” Order Granting Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 2 (Va Corp. Commission, August 26, 2015).

79. Defendants' actions and representations are such that they should be treated as a unitary entity. *See, e.g.*, Charter Communications, Inc. July 2018 (Form 8-K), at 1, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> ("Over the last two years, we have invested significantly to quickly integrate and unify the operating strategies of three large cable operators."); Charter Communications, Inc. June 2018 Quarterly Report at p. 5 (Form 10-Q), <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as "5/1/2018 10-Q" (last accessed 8/10/2018) (Charter Communications' "operations are managed and reported to its Chief Executive Officer ('CEO'), the Company's chief operating decision maker, on a consolidated basis. The CEO assesses performance and allocates resources based on the consolidated results of operations. Under this organizational and reporting structure, the Company has one reportable segment, cable services."); Charter Communications, Inc. July 2018 (Form 8-K), at 1, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> (stating "we will be operating as one company, with a unified product, marketing, and service infrastructure"); Charter Communications, Inc. 2018 Annual Report (Form 10-K) at p. 7, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as "2/2/2018 10-K" (last accessed Aug. 8, 2018) ("Our operations are centralized, with senior executives located at several key corporate offices, responsible for coordinating and overseeing operations, including establishing company-wide strategies, policies and procedures. Sales and marketing, network operations, field operations, customer operations, engineering, advertising sales, human resources, legal, government relations, information technology and finance are all directed at the corporate level.").

80. Upon information and belief, Charter Communication also controls and directs its subsidiaries, including Charter Holdings, Spectrum Management, Charter Operating, and Time

Warner Cable (collectively the “Subordinate Entities”) through management agreements for the cable systems owned and operated by the Defendants. *See, e.g.*, Charter Communications, Inc. 2018 Annual Report (Form 10-K) at p. F-38. Moreover, upon information and belief, Charter Communications maintains technical requirements and customer service standards to maintain consistency between different entities providing service under the Spectrum brand and to process signaling in compliance with various relevant standards.

81. Sprint also incorporates herein by reference First Amended Complaint Paragraphs 94-102.

### **JOINDER**

82. Joinder of Charter Communications, Charter Holdings, Spectrum Management, Charter Operating, and Time Warner Cable is proper under 35 U.S.C. § 299. The allegations of patent infringement contained herein arise out of the same series of transactions or occurrences relating to the making, using, offering for sale, and/or selling within the United States, and/or importing into the United States, of the same accused products or services.

83. Common questions of fact relating to infringement will arise in this action. For example, common questions of fact regarding the design, development, and operation of Defendants’ video services without Sprint’s permission will arise in this action, as well as common questions of fact concerning the defendants’ decision to implement infringing services.

84. Common questions of fact will exist as to damages resulting from Defendants’ willful infringement, including the profits and revenues derived by Defendants from selling, making, and/or using or operating Sprint’s patented technology. On information and belief, common questions of fact and law will also likely exist with regard to Defendants’ defenses in this litigation, if any.

## **FACTUAL BACKGROUND**

### **The Patents-In-Suit**

85. Sprint Communications is the owner by assignment of all right, title, and interest in and to United States Patent No. 6,754,907 (“the ‘4,907 patent”) entitled “Remote Control of Video-On-Demand System,” which duly and legally issued in the names of James Schumacher, Mike O’Brien, and Jay Cee Straley on June 22, 2004. A true and correct copy of the ‘4,907 patent is attached to this Amended Complaint as Exhibit A.

86. Sprint Communications is the owner by assignment of all right, title, and interest in and to United States Patent No. 6,757,907 (“the ‘7,907 patent”) entitled “Display Selection in a Video-On-Demand System,” which duly and legally issued in the names of James Schumacher, Mike O’Brien, and Jay Cee Straley on June 29, 2004. A true and correct copy of the ‘7,907 patent is attached to this Amended Complaint as Exhibit B.

87. Sprint Communications is the owner by assignment of all right, title, and interest in and to United States Patent No. 7,559,077 (“the ‘077 patent”) entitled “Video System for Use Where the Network Transfer Rate is Slower than the Video Display Rate,” which duly and legally issued in the name of Warren Cope on July 7, 2009. A true and correct copy of the ‘077 patent is attached to this Amended Complaint as Exhibit C.

88. The patents identified in First Amended Complaint Paragraphs 85–87 and attached as Exhibits A–C are herein collectively referred to as the “Asserted Patents.”

### **Sprint’s Patented Video Technologies**

89. Sprint has a long history of technological innovation, including revolutionary network design and leveraging the capabilities of the Internet and IP protocols. In the 1990s, Sprint sought to leverage its technological expertise to improve the control and delivery of video

content to consumers. While video systems were known before these patents were filed, conventional video systems suffered from numerous significant limitations that the patents addressed.

90. Specifically, the '7,907 and '4,907 patents describe, among other things, an enhanced video-on-demand system which transfers video content and control screen signals over a second communications system to a portable computer that can be used for control. *See, e.g.,* Ex. A, '4,907 Patent at 1:30-43; Ex. B, '7,907 Patent at 1:39-55. The video-on-demand system also receives a control signal from the second communication system and, based on that signal, determines whether to transfer video-on-demand content to a first communication system which may be further connected to a television display set, for example, or a second communication system which may be further connected to a portable device (e.g., a cell phone or computer).

91. Sprint's additional innovations relating to content delivery are also shown and described in the '077 patent. A network interface configured to receive a network signal from a communication network wherein the network signal includes video, a memory configured to store the video from the network signal, a video interface configured to transfer a video signal to a video display wherein the video signal includes the video from the memory, and a processing system configured to determine when to initiate the transfer of the video signal from the video interface based on a first time period and a second time period wherein the first time period is determined based on the video display rate times a first amount of the video in the memory and the second time period is determined based on a network transfer rate times a second amount of the video to be subsequently received in the network signal was not common or conventional at the time of the '077 patent.

92. For instance, as stated in the ‘077 patent, conventional video-on-demand systems at the time did not allow the video-on-demand system to download a portion of the video before the video display began. *See* Ex. C, ‘077 Patent, at 1:35-56. Likewise, the prior video-on-demand systems did not offer video display to a user “[i]f the network transfer rate becomes slower than the video display rate.” *See, e.g., id.* *See, e.g.,* Ex. C, ‘077 Patent, at 1:35-56. Conventional systems also did not determine when to initiate transfer of video to a display based on video display rates, network transfer rates, the amount of video already transferred, and the amount of video still to be transferred.

93. The inventors of the ‘077 patent solved these limitations. *See, e.g.,* Ex. C, ‘077 Patent, at 1:35-56. They invented a system configured to receive a network signal including a video, store the video from the network signal in memory, determine when to initiate transfer of the video from the memory based on first and second time periods, and transfer the video to a video display in response to the determination. Thus, the ‘077 patent discloses an improved video system that is able to receive and deliver a constant stream of video content using a system capable of using a network with less bandwidth. In particular, the disclosures of the ‘077 patent provide an unconventional technological solution to an issue arising specifically in the context of video display and network technologies involving electronic devices, including by introducing novel elements directed to improving the function and working of electronics, such as the claimed video system involving networks, memories, displays, and processing systems.

### **Charter**

94. Upon information and belief, Charter is the second largest cable operator in the United States and a leading broadband communications company providing video, Internet, and voice services to residential and business customers. *See* Charter Communications 2018 Annual

Report (Form 10-K) at p. 1-3, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed May 15, 2018). Upon information and belief, Charter has over 27 million customers and its network reaches 50 million homes and businesses. *See id.*

95. Upon information and belief, Charter Communications is the parent company to Charter Holdings, owns, and exercises control over Charter Holdings. *See generally id.* at pp. 1-3; Charter Communications 2017 Annual Report (Form 10-K) at p. F-9, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as (last accessed Aug. 10, 2018). CCO Holdings, LLC 2018 Annual Report (Form 10-K) at p. 1-3, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/13/2018 10-K” (last accessed May 15, 2018). Upon information and belief, Charter Communications and Charter Holdings are parent companies to, and own and exercise control over, Spectrum Management, and Charter Operating, Time Warner Cable. *See Charter Communications 2018 Annual Report (Form 10-K)* at p. 1-3, F-9, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed May 15, 2018). Upon information and belief, substantially all of Charter’s operations reside with Charter Operating. *See id.*

96. Upon information and belief, Charter Communications entered into an agreement for a merger with Time Warner Cable on May 23, 2015. *See id.* Upon information and belief, Charter Communications completed the merger with Time Warner Cable on May 18, 2016, with Charter Communications becoming the parent company which controls operations of the combined companies. *See Charter Communications 2017 Annual Report (Form 10-K)* at p. 1-4, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/16/2017 10-K” (last accessed May 15, 2018). Upon information and belief, Time Warner Cable merged into what is now known as Spectrum Management. *See e.g., TWC Rule 7.1 Disclosure Statement, Sprint*

*Communications Co. L.P. v. Time Warner Cable Inc., et al.*, Case No. 11-cv-2686-JWL (D. Kan.), D.I. 253. Upon information and belief, as part of that merger, Charter Communications and/or one or more of its subsidiaries assumed Time Warner Cable's past liabilities with regard to the infringement of the Asserted Patents.

97. Upon information and belief, Defendants operate collectively as a single operating unit under the direction and control of parent company Charter Communications. Upon information and belief, the Charter Entities, acting under the direction and control of parent company Charter Communications, own and operate one or more cable networks and jointly provide the accused products and services under the Spectrum brand name. Since its acquisition by Charter Communications, Time Warner Cable has operated under the direction and control of Charter Communications and have provided services under the Spectrum brand. Charter Communications, Inc. July 2018 (Form 8-K), at 1, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> ("Over the last two years, we have invested significantly to quickly integrate and unify the operating strategies of three large cable operators."). Specifically, Charter Communications provides services through the Subordinate Entities.

98. For example, Charter Communications' "operations are managed and reported to its Chief Executive Officer ('CEO'), the Company's chief operating decision maker, on a consolidated basis. The CEO assesses performance and allocates resources based on the consolidated results of operations. Under this organizational and reporting structure, the Company has one reportable segment, cable services." Charter Communications, Inc. June 2018 Quarterly Report at 5 (Form 10-Q), <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as "5/1/2018 10-Q" (last accessed 8/10/2018); *see* Charter Communications, Inc. July 2018 (Form

8-K), at 1, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> (stating “we will be operating as one company, with a unified product, marketing, and service infrastructure”); Charter Communications, Inc. 2018 Annual Report (Form 10-K) at p. 7, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed Aug. 8, 2018) (“Our operations are centralized, with senior executives located at several key corporate offices, responsible for coordinating and overseeing operations, including establishing company-wide strategies, policies and procedures. Sales and marketing, network operations, field operations, customer operations, engineering, advertising sales, human resources, legal, government relations, information technology and finance are all directed at the corporate level.”). Upon information and belief, Charter Communication also controls and directs the Subordinate Entities through management agreements for the cable systems owned and operated by the Defendants. *See, e.g.*, Charter Communications, Inc. 2018 Annual Report (Form 10-K) at p. F-38. Moreover, upon information and belief, Charter Communications maintains technical requirements and customer service standards to maintain consistency between different entities providing service under the Spectrum brand and to process signaling in compliance with various relevant standards.

99. Additionally, on information and belief, the Defendants share at least a majority of officers, directors, and other executives. Further, the Subordinate Entities all share a principal place of business. D.I. 26-1, Bollinger Decl. ¶¶ 7-8. On information and belief Charter Communications’ annual filings consolidate all controlled subsidiaries. Further, on information and belief, defendants share various telephone numbers. On information and belief, all Defendants share a single website for their products—all offered under the Spectrum branded. For example, the former web addresses for both Charter Communications, Inc.

(www.charter.com) and Time Warner Cable, Inc. (www.timewarnercable.com) now automatically direct users to one singular website, www.spectrum.com, which on information and belief is copyrighted by Charter Communications. Additionally, the investor relations page on the Spectrum website lists a single list of board of directors and a single list of company officers. *See* Corporate Governance, Spectrum, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-govmanage> (last visited Aug. 10, 2018). On information and belief, Charter Communication also controls its subsidiaries access to financial and capital markets. *See, e.g.*, Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 20 (Va Corp. Commission, July 7, 2015).

100. Upon information and belief, each Defendant has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sell a variety of video products or services without Sprint's permission, including Spectrum TV, the "Spectrum TV" application, SpectrumTV.com, and legacy TWC and Charter branded TV products such as TWC TV, Charter TV, "TWC TV," TWCTV.com, and the "Charter TV" application, in connection with Defendant's video systems, servers, and backend components and interfaces, without Sprint's permission.

101. Upon information and belief, each Defendant has made, used, offered to sell, or sold, and continues to make, use, offer to sell, or sell Spectrum TV, the "Spectrum TV" application, SpectrumTV.com, and legacy TWC and Charter branded TV products such as TWC TV, Charter TV, "TWC TV," TWCTV.com, and the "Charter TV" application, in connection with Defendant's video systems and servers, within this Judicial District.

102. Upon information and belief, each Subordinate Entity offers and has made, used, offered to sell, or sold, and continues to make, use, offer to sell, or sell Spectrum TV, the “Spectrum TV” application, SpectrumTV.com, Charter TV, the “Charter TV” application, TWC TV, the “TWC TV” application,<sup>4</sup> and TWCTV.com (collectively, the “Accused Products and Services”) under the direction and control of Charter Communications, either as a subsidiary of Charter Communication, pursuant to management agreements, and/or pursuant to a franchise agreement with Charter Communication. Upon information and belief, Charter Communications is party to commercial agreements by which the Subordinate Entities agree to provide the Accused Products and Services, thereby representing its authority to control the Subordinate Entities’ provision of the Accused Products and Services. Further, upon information belief, Charter Communications has represented to various State agencies and/or officials that it controls and offers services through its subsidiaries. *See, e.g.*, Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 20 (Va Corp. Commission, July 7, 2015); Charter Communications 2018 Annual Report (Form 10-K) at p. 26, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-sec> as “2/2/2018 10-K” (last accessed Aug. 8, 2018); Exs. A and B for Petition for Approval of Transfer of Control, *In re Time Warner Cable Inc., and Charter Communications, Inc.*, Case No. Puc-2015-00036, at 19-20 (Va Corp. Commission, July 7, 2015) (Charter “will control the regulated companies in Virginia.”). Moreover, on information and belief, Charter Communication exerts and exercises direction and control over its franchisees by, for example, requiring services provided by the Subordinate

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<sup>4</sup> On information and belief, the TWC TV app was the predecessor app offering similar or identical functionality to the functionality provided by the Spectrum TV app when used in connection with Charter’s or TWC’s video systems.

Entities under the Spectrum brand to comply with technical requirements and customer service standards to maintain consistency. Upon further information and belief, Charter Communications maintains the right to terminate franchisee agreements for failure to follow Charter Communications' direction.

103. Further, Time Warner Cable had knowledge of the '7,907 and '4,907 patents and the infringing nature of its services no later than 2013. On or about May 20, 2013, Sprint and Time Warner Cable jointly filed a Stipulated Protective Order,<sup>5</sup> specifically noting the *Comcast Cable Communications, LLC et al. v. Sprint Communications Company L.P.*, Case No. 2:12-cv-00859-JD (E.D.P.A.) ("E.D.P.A. Comcast Litigation"), where Sprint asserted, *inter alia*, the '7,907 patent and the '4,907 patent against Comcast. Through its knowledge of the E.D.P.A. Comcast Litigation and its interactions with counsel for Comcast in connection with the various patent infringement actions brought by Sprint against Comcast and/or Time Warner Cable, Time Warner Cable became aware of the '7,907 patent and '4,907 patent—as well as Sprint's infringement allegations and the relevance of Sprint's patents to Time Warner Cable's infringing products—no later than 2013 and, despite such knowledge, subsequently began infringing these patents.

104. Given that Time Warner Cable was aware of the E.D.P.A. Comcast Litigation and was coordinating with another cable company, Comcast, as to the defense of Sprint's various patent infringement claims against the cable companies, to the extent Time Warner Cable did not have actual knowledge of the '7,907 patent and '4,907 patent at the time it began infringement, Time Warner Cable's lack of knowledge was based on its knowing, intentional, and willful blindness with respect to Sprint's intellectual property rights, including the '7,907 patent and

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<sup>5</sup> Stipulated Protective Order, at 6, *Sprint Communications Co. L.P. v. Comcast Cable Communications, LLC et al.*, Case No. 11-cv-2684-JWL (D. Kan.), D.I. 88.

‘4,907 patent. Specifically, to the extent Time Warner Cable and the Charter Entities did not have actual knowledge of the ‘7,907 patent and ‘4,907 patent, they willfully, intentionally, and egregiously blinded themselves from acquiring such knowledge in view of their subjective beliefs that there was a high probability that Sprint possessed patents relating to video-on-demand services and the accused products and that there was a high risk they infringed those patents.

105. On or about May 2016, following Charter Communication’s merger with Time Warner Cable, on information and belief, each Defendant gained knowledge of the ‘7,907 and ‘4,907 patents and the infringing nature of its products through its participation in, as well as funding and control of, Time Warner Cable’s alleged defense in the litigation styled as *Sprint Communications Co. L.P. v. Time Warner Cable Inc., et al.*, Case No. 11-cv-2686-JWL (D. Kan.).<sup>6</sup> See e.g., TWC Rule 7.1 Disclosure Statement, D.I. 253; Stipulated Protective Order, at 6, *Sprint Communications Co. L.P. v. Comcast Cable Communications, LLC et al.*, Case No. 11-cv-2684-JWL (D. Kan.), D.I. 88.

106. The Defendants’ knowledge of or willful blindness to certain of the Asserted Patents notwithstanding, each Defendant continued to make, use or operate, sell, and/or offer for sale its systems, products and services that infringe Sprint’s intellectual property, all despite a high likelihood that Defendants’ actions constituted infringement of one or more valid patents. Each Defendant either knew or should have known, or was willfully blind to, such infringement of Sprint’s intellectual property rights.

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<sup>6</sup> See e.g., Charter Communications, Inc. 2017 Annual Report, at F-45 (“Sprint . . . filed a complaint in the U.S. District Court for the District of Kansas alleging that Legacy TWC infringes 12 U.S. patents purportedly relating to Voice over Internet Protocol (“VoIP”) services. . . **Charter** intends to vigorously defend against this lawsuit.”) (emphasis added).

### **The Accused Products and Services**

107. Sprint accuses each Defendant's video systems, products, and services in connection with, but not limited to, Spectrum TV, the "Spectrum TV" application, SpectrumTV.com, Charter TV, the "Charter TV" application, TWC TV, the "TWC TV" application,<sup>7</sup> and TWCTV.com (collectively, the "Accused Products and Services").

- A. On information and belief, Charter Communications owns, rents, contracts for, or otherwise controls the operation of the system used to provide the Accused Products and Services. For each and every item of the system described in ¶¶ 108-128 that Charter Communications does not itself directly operate, Charter Communications directs and controls the operation of the system in the manner described in those paragraphs. For example, to the extent Charter Communications does not itself operate an application for a mobile device, Charter Communications directs a Subordinate Entity to operate an application for mobile device in the manner described in the allegations in ¶¶ 108-128 that pertain to such, in a way that ensures communications are received, processed and sent in the manner described in ¶¶ 108-128.
- B. In the alternative and on information and belief, each of the Subordinate Entities owns, rents, contracts for, or otherwise controls the operation of the system described in ¶¶ 108-128. For each and every item of the system described in ¶¶ 108-128 a Subordinate Entity does not itself directly operate, the Subordinate Entity directs and controls the operation of the system in the manner described in those paragraphs.
- C. In the alternative and on information and belief, Spectrum Management owns, rents, contracts for, or otherwise controls the operation of the system described in ¶¶ 108-128. For each and every item of the system described in ¶¶ 108-128 that Spectrum Management does not itself directly operate, Spectrum Management directs and controls the operation of the equipment in the manner described in those paragraphs. For example, to the extent Spectrum Management does not itself operate an application for a mobile device, Spectrum Management directs the operation of the system in the manner described in the allegations in ¶¶ 108-128, in such a way that the system is obligated to do so in the manner described in ¶¶ 108-128.

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<sup>7</sup> On information and belief, the TWC TV app was the predecessor app offering similar or identical functionality to the functionality provided by the Spectrum TV app when used in connection with Charter's or TWC's video systems.

### The '907 Patents

108. For example, in connection with Defendants' video service and architecture, and while using the Accused Products and Services, each Defendant operates an infringing video-on-demand system that infringes at least claim 1 of the '7,907 patent and claim 1 of the '4,907 patent. Through these products and services, each Defendant enables its customers to discover, preview, control, and view video-on-demand information and content using portable devices:

| Features   | At Home | On-the-Go | Roku at Home |
|--|---------|-----------|--------------|
|  Watch Live TV  | ✓       | ✓         | ✓            |
|  Stream shows and movies<br><small>On-the-go streaming is for select networks only.</small> | ✓       | ✓         |              |
|  Program Your DVR  | ✓       | ✓         |              |
|  Browse guide listings  | ✓       | ✓         | ✓            |

#### **What is the Spectrum TV App?**

##### **The Spectrum TV App on mobile:**

The Spectrum TV App is a mobile application that allows you to watch live TV and On Demand content at no additional charge from your mobile device. You can also tune to your DVR, schedule recordings, browse the channel guide, search for content, learn about your favorite shows and more!

##### **The Spectrum TV App on connected devices:**

The Spectrum TV App can be used with your Roku, Samsung Smart TV and Xbox One. It's an application that allows you to watch Spectrum TV in even more places in your home by using your streaming device when connected to an authorized modem. You can browse the channel guide, search for live TV content on now and up to seven days in the future, learn about your favorite shows and more!

#### **What is the Send to TV feature?**

You can use the Spectrum TV App to control your cable Set-Top Box. Locate the "Send to TV" icon on the app. Next, choose which cable box should receive the content. (This option is found in Settings). Naming each cable box will help ensure you select the correct one.) Next, press the "Send to TV" button. If content is live, the box will tune to that specific channel and you can continue watching without interruption. If the content is On Demand, the On Demand menu screen will appear and you will need to use your remote to purchase and/or play the content.

This feature is available on Spectrum TV App on mobile devices and on SpectrumTV.com, but not on Roku, Xbox One or Samsung Smart TV.

*See Experience the Spectrum TV App, Spectrum, <https://www.spectrum.com/cable-tv/spectrum-tv-app.html> (last accessed May 15, 2018).*

## Explore the Spectrum TV App

### On Demand

Select the **On Demand** icon at the bottom of the screen to browse programming. After selecting an On Demand program, you can choose [Watch on TV](#) to send the program to your default Spectrum Receiver.

**Note:** The next episode of an On Demand TV series will automatically play once the current one finishes. This feature is only available for select TV shows in the On Demand library.

### Watch On TV

The Watch on TV option allows you to use the Spectrum TV app to send select programming to a receiver in your home.

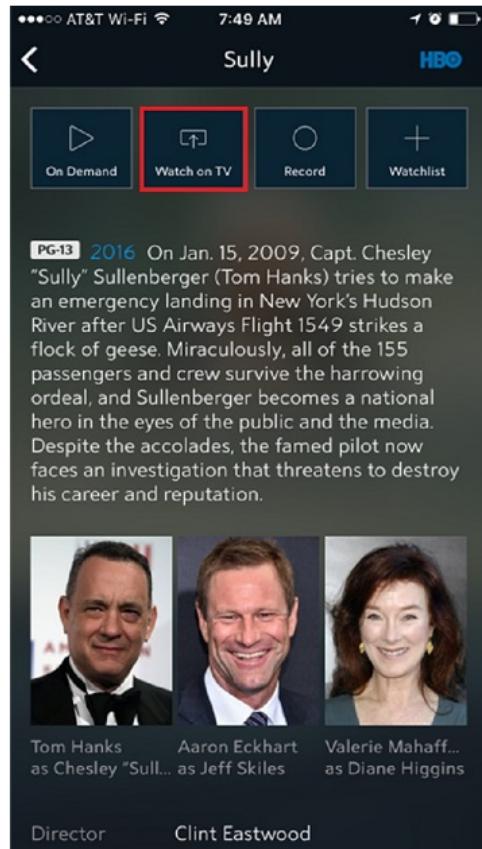
**Note:** The Watch on TV feature is only available for Spectrum TV customers with the iGuide or Passport guide. [Find out which guide you have.](#)

To send programming to a receiver to watch it on TV:

1. Select **My Library** and then open the **Settings** menu.

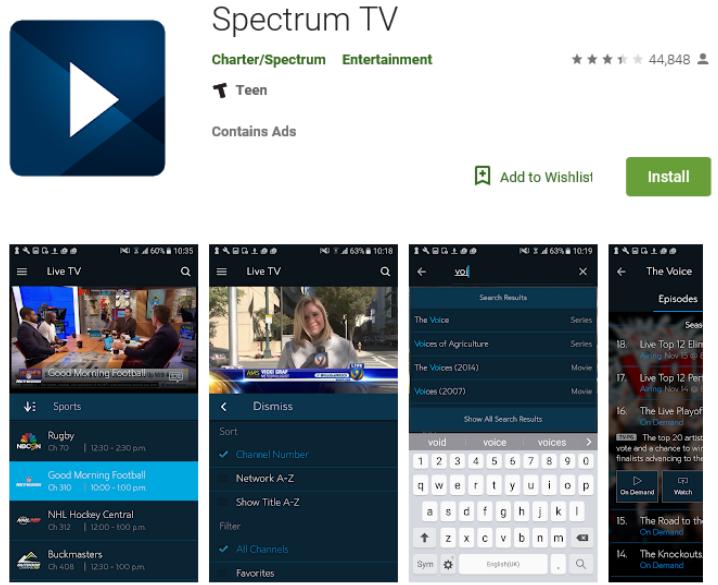


2. Choose **Devices** from the Settings menu.
3. Choose the receiver you want to send the program to. [Learn more](#) about managing your Devices.
4. Select **On Demand** at the bottom of the screen and then choose the program you want to watch.
5. Tap **Watch on TV**.



5. A confirmation banner will appear at the top of your device's screen indicating the receiver the program is now playing on. [Learn how](#) to change your default device.

*See Explore the Spectrum TV App, <https://www.spectrum.net/support/tv/explore-spectrum-tv-app/> (last accessed May 15, 2018).*



Take your Spectrum TV experience with you! With the Spectrum TV App, you can enjoy up to 250 live TV channels and up to 30,000 On Demand TV shows and movies when you're connected to your Spectrum Internet WiFi network at home. Plus, when you're on the go, enjoy up to 150 live channels and up to 20,000 On Demand titles anywhere you have an internet connection. (See note on availability below.)

*See Spectrum TV, [https://play.google.com/store/apps/details?id=com.TWCableTV&hl=en\\_US](https://play.google.com/store/apps/details?id=com.TWCableTV&hl=en_US) (last accessed May 15, 2018).*



With the Charter TV App, customers now have even more choice in where and how they watch their favorite programming at no extra charge. Charter TV customers, can now watch over 130 live TV channels, browse thousands of On Demand titles and TV listings, schedule DVR recordings, get recommendations and more. The unique Kid Zone feature enables easy access to pre-approved kid-friendly content, creating a safe viewing experience for children. For sports fans, the Charter TV App Sport Zone feature gives fans instant access to scores and sports content. (Sport Zone is currently available on iOS, Android is forthcoming). Customers can even use their device as a remote to change channels on their TV. With the Charter TV App customers now have full control of their TV experience in the palm of their hands.

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**Key Charter TV App Features:**

- 130+ Live TV Channels Available for In-Home Viewing
- Browse thousands of On Demand Listings
- Send To TV (Live and On Demand Listings)
- Watch Showtime channels anywhere you go with a WiFi connection (Showtime subscription required)
- Browse the Guide and search for content
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**Requirements:**

- Charter TV
- Wi-Fi connection for streaming video
- Charter.net email address and password
- iPhone, iPad or iPod Touch running iOS 5.1 or above
- Kindle Fire (except 1st generation), including the new Kindle Fire HDX
- Android devices (Tablet and Phone) running Android 4.0 or above

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109. Each Defendant's Accused Products and Services, including its video-on-demand system, comprise a second communication interface configured to transfer control screen signals to a second communication system (e.g., the Internet):

| Features   | At Home | On-the-Go | Roku at Home |
|--|---------|-----------|--------------|
|  Watch Live TV  | ✓       | ✓         | ✓            |
|  Stream shows and movies<br><small>On-the-go streaming is for select networks only.</small> | ✓       | ✓         |              |
|  Program Your DVR   | ✓       | ✓         |              |
|  Browse guide listings  | ✓       | ✓         | ✓            |

#### [What is the Spectrum TV App?](#)

##### **The Spectrum TV App on mobile:**

The Spectrum TV App is a mobile application that allows you to watch live TV and On Demand content at no additional charge from your mobile device. You can also tune to your DVR, schedule recordings, browse the channel guide, search for content, learn about your favorite shows and more!

##### **The Spectrum TV App on connected devices:**

The Spectrum TV App can be used with your Roku, Samsung Smart TV and Xbox One. It's an application that allows you to watch Spectrum TV in even more places in your home by using your streaming device when connected to an authorized modem. You can browse the channel guide, search for live TV content on now and up to seven days in the future, learn about your favorite shows and more!

#### [What is the Send to TV feature?](#)

You can use the Spectrum TV App to control your cable Set-Top Box. Locate the "Send to TV" icon on the app. Next, choose which cable box should receive the content. (This option is found in Settings). Naming each cable box will help ensure you select the correct one.) Next, press the "Send to TV" button. If content is live, the box will tune to that specific channel and you can continue watching without interruption. If the content is On Demand, the On Demand menu screen will appear and you will need to use your remote to purchase and/or play the content.

This feature is available on Spectrum TV App on mobile devices and on SpectrumTV.com, but not on Roku, Xbox One or Samsung Smart TV.

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## Explore the Spectrum TV App

## On Demand

Select the **On Demand** icon at the bottom of the screen to browse programming. After selecting an On Demand program, you can choose **Watch on TV** to send the program to your default Spectrum Receiver.

**Note:** The next episode of an On Demand TV series will automatically play once the current one finishes. This feature is only available for select TV shows in the On Demand library.

### Watch On TV

The Watch on TV option allows you to use the Spectrum TV app to send select programming to a receiver in your home.

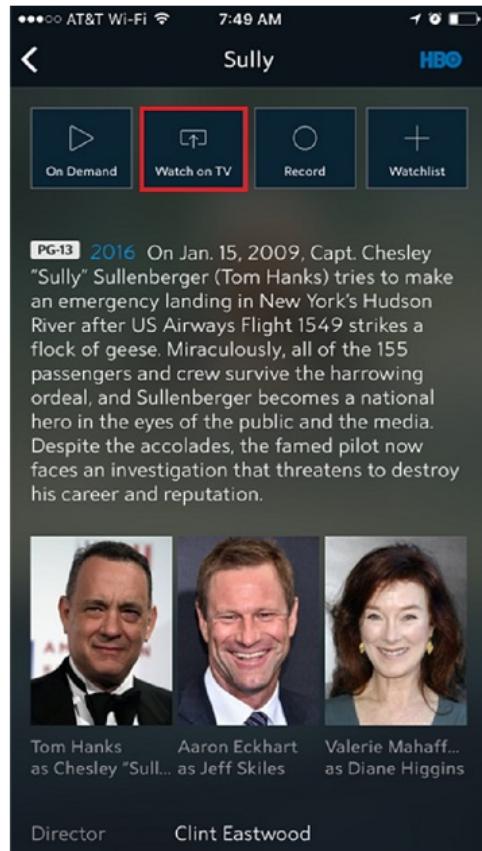
**Note:** The Watch on TV feature is only available for Spectrum TV customers with the iGuide or Passport guide. [Find out which guide you have.](#)

To send programming to a receiver to watch it on TV:

1. Select **My Library** and then open the **Settings** menu.

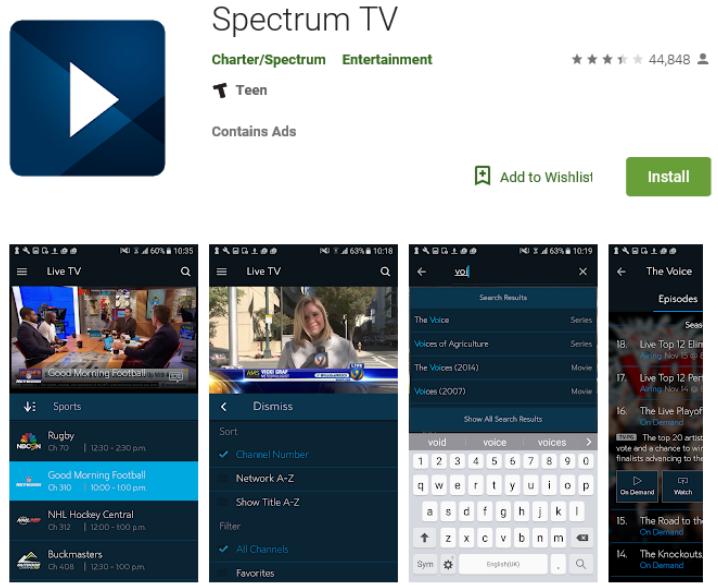


2. Choose **Devices** from the Settings menu.
3. Choose the receiver you want to send the program to. [Learn more](#) about managing your Devices.
4. Select **On Demand** at the bottom of the screen and then choose the program you want to watch.
5. Tap **Watch on TV**.



5. A confirmation banner will appear at the top of your device's screen indicating the receiver the program is now playing on. [Learn how](#) to change your default device.

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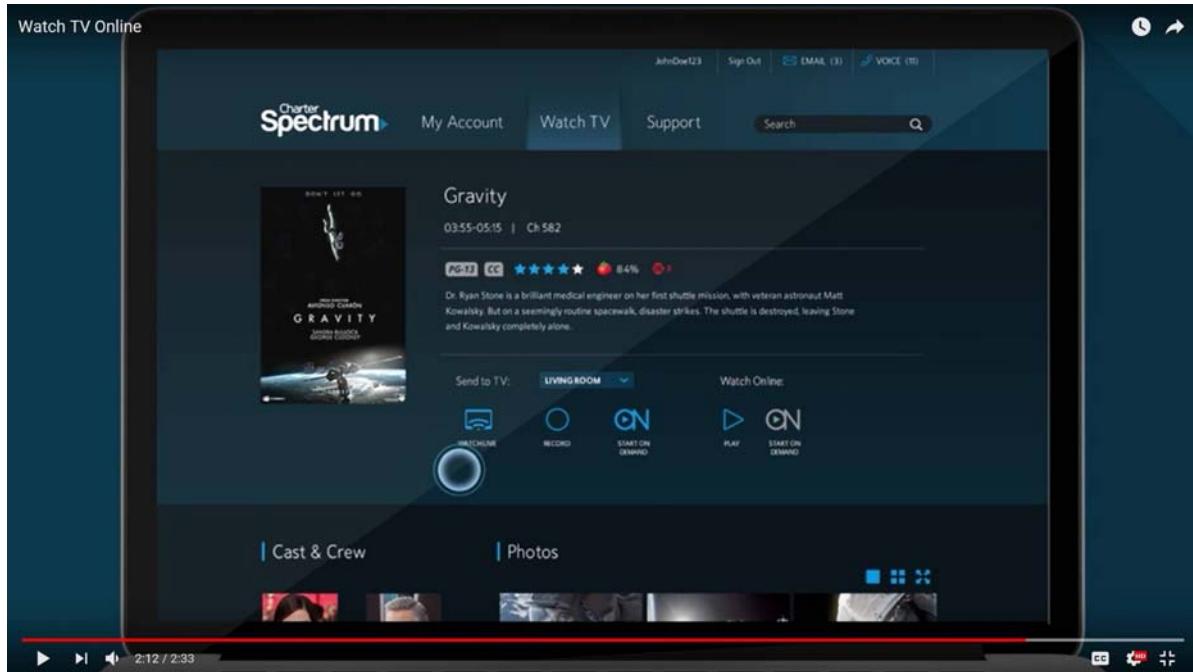
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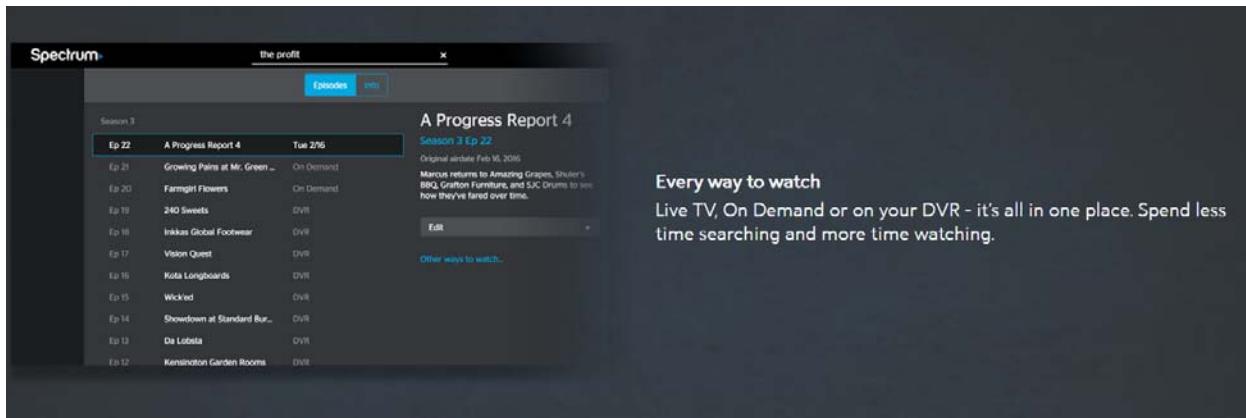
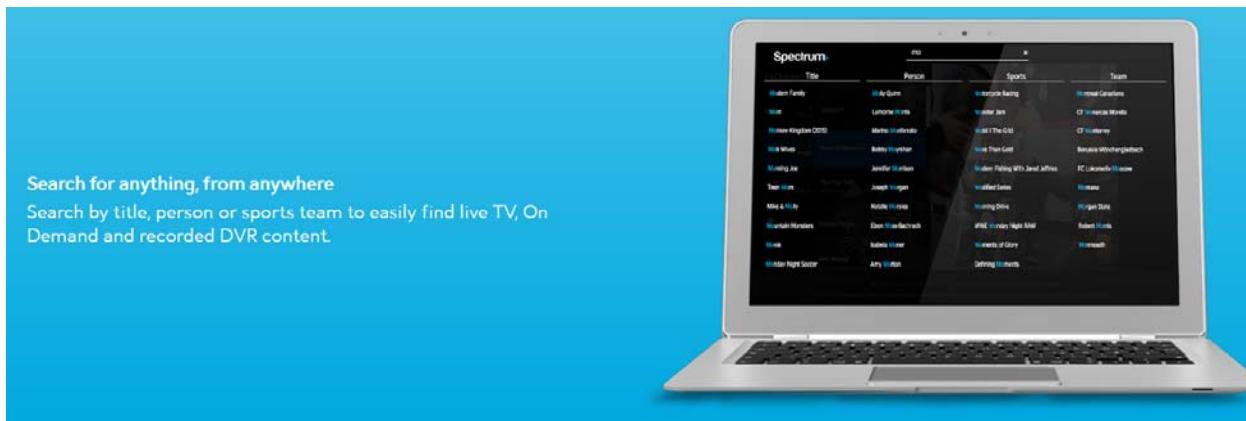
**Requirements:**

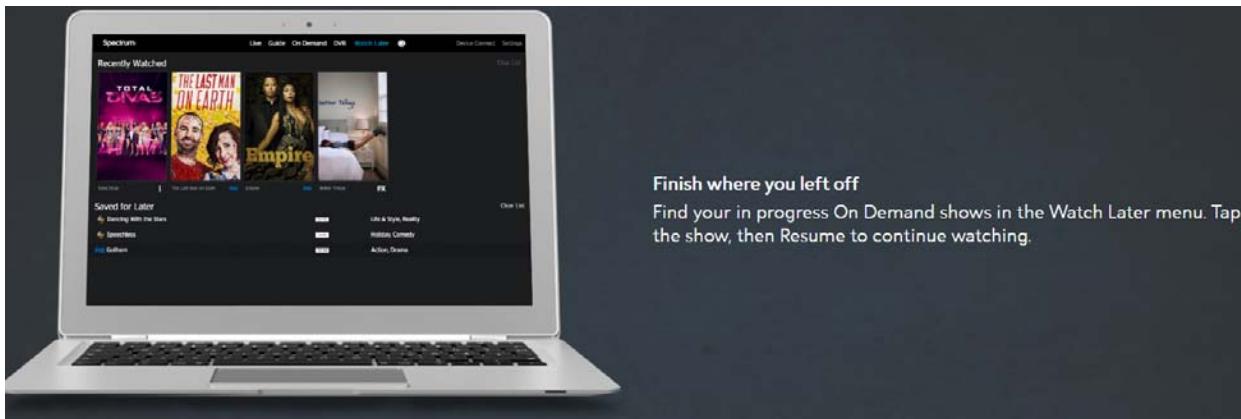
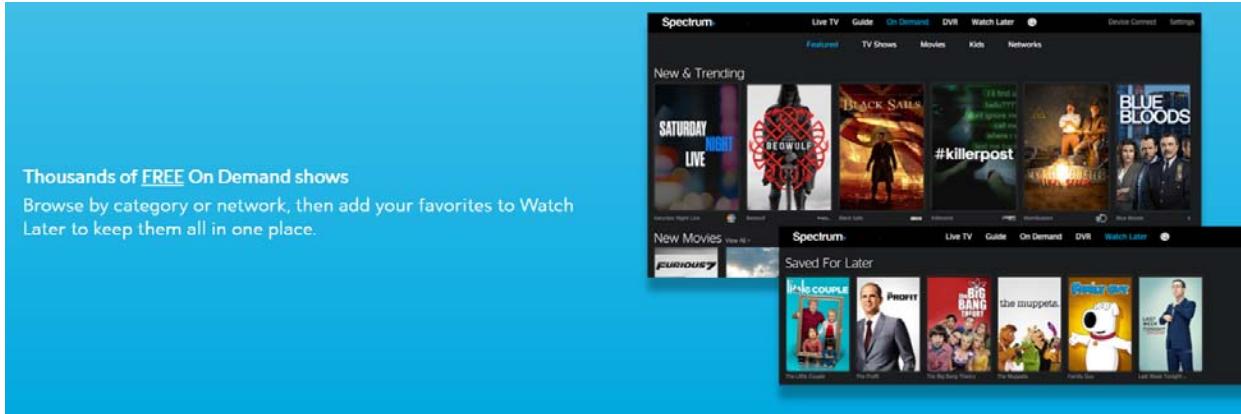
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Time Warner Cable video customers can now access more than 4,000 TV shows and movies on-demand from 91 programming partners at [TWCTV.com](http://TWCTV.com) via their PCs or Macs, for no additional charge.

In December, the MSO launched video-on-demand content for its [TWC TV app for iPad](#); an Android version of the app also is in the works.

The content includes free as well as subscription on-demand content (for subscribers of premium networks such as HBO, Showtime and Starz). TWCTV.com provides pause, fast-forward and rewind features (except fast-forward is disabled in some cases where programmers require it).

To view the content on the site, users must have Microsoft IE 7.0 or higher for Windows; or Firefox 4, Safari 5 or Chrome 24 for Windows or Macintosh. The Microsoft Silverlight plug-in version 5.0 or higher also is required.

*See <https://www.multichannel.com/news/time-warner-cable-adds-vod-content-twctvcom-326026> (last accessed May 15, 2018).*

110. In addition, each Defendant's Accused Products and Services, including its video-on-demand system, comprises a second communication interface configured to receive a viewer or video control signal from the second communication system and to transfer video content or video signals (e.g., video content) to the second communication system (e.g., the Internet):

| Features   | At Home | On-the-Go | Roku at Home |
|--|---------|-----------|--------------|
|  Watch Live TV  | ✓       | ✓         | ✓            |
|  Stream shows and movies<br><small>On-the-go streaming is for select networks only.</small> | ✓       | ✓         |              |
|  Program Your DVR   | ✓       | ✓         |              |
|  Browse guide listings  | ✓       | ✓         | ✓            |

● **What is the Spectrum TV App?**

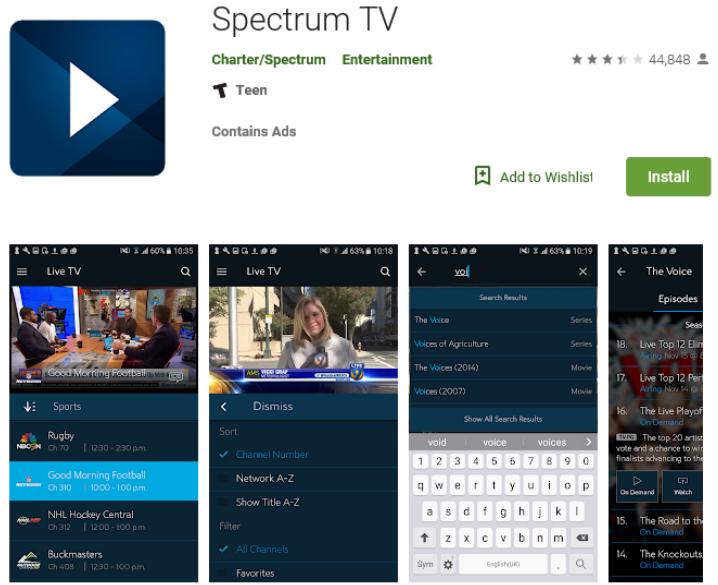
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The Spectrum TV App can be used with your Roku, Samsung Smart TV and Xbox One. It's an application that allows you to watch Spectrum TV in even more places in your home by using your streaming device when connected to an authorized modem. You can browse the channel guide, search for live TV content on now and up to seven days in the future, learn about your favorite shows and more!

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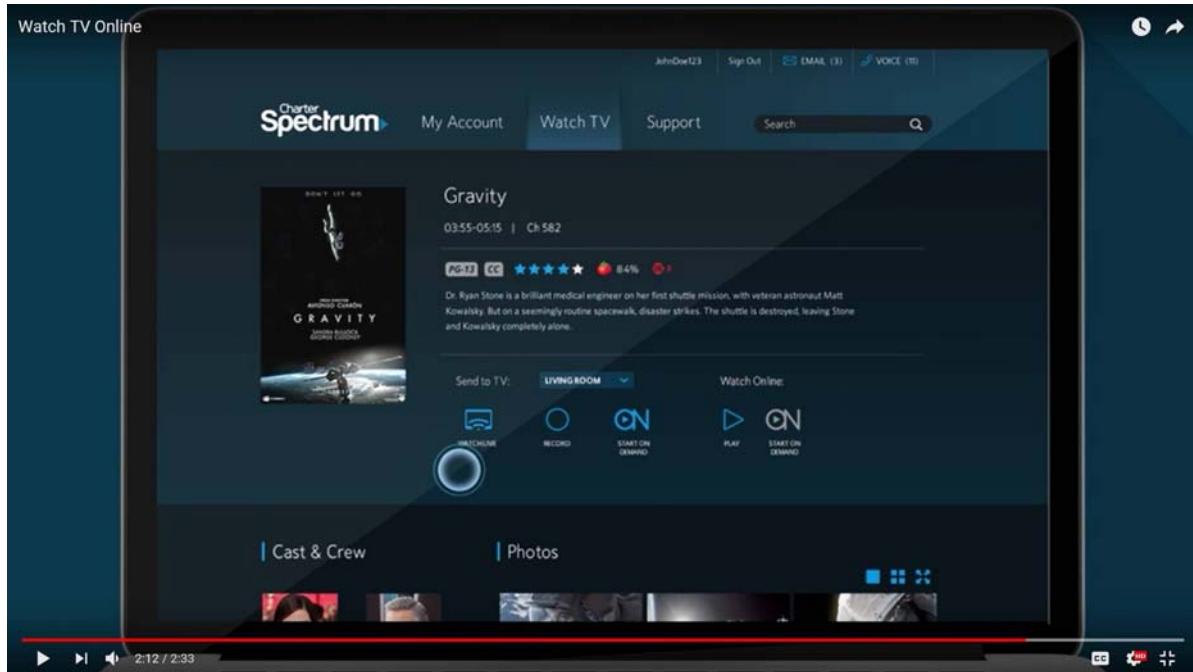
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- Kid Zone
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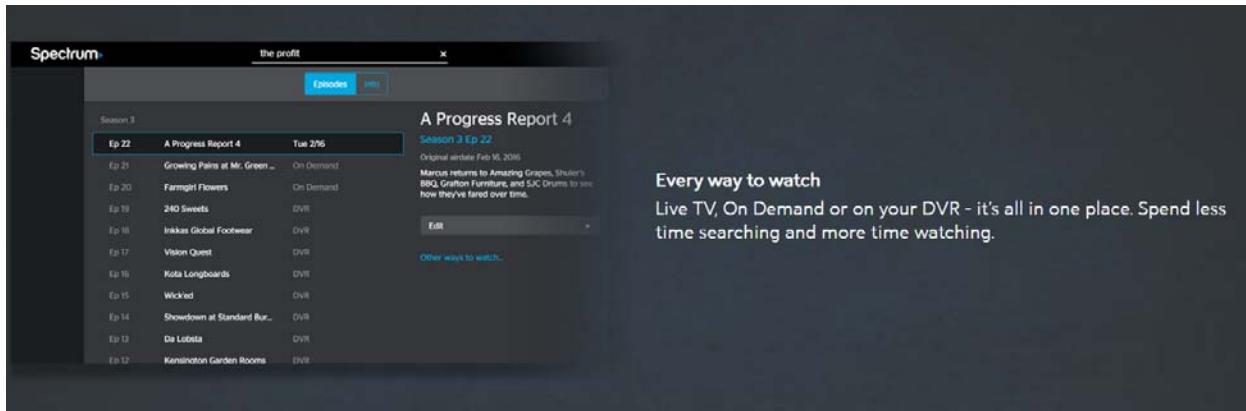
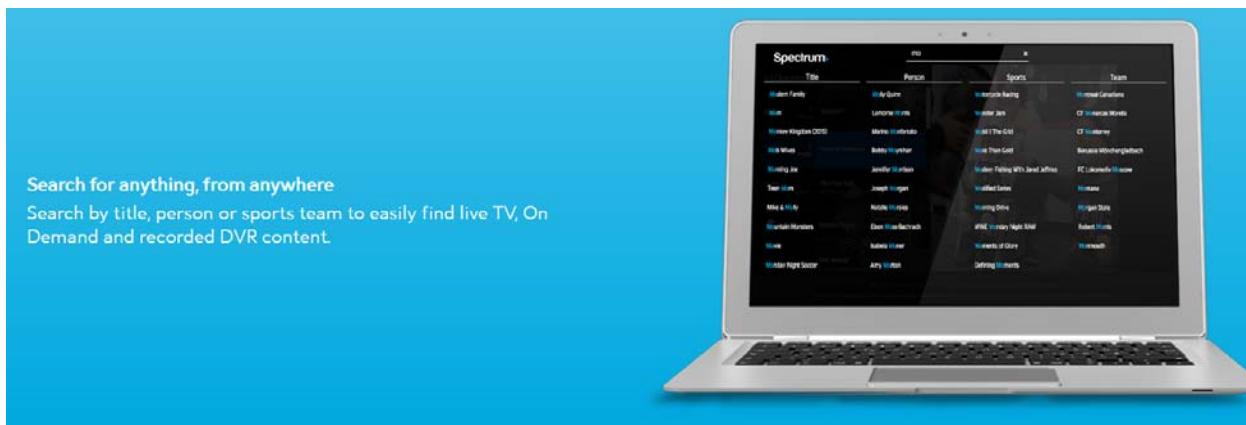
**Requirements:**

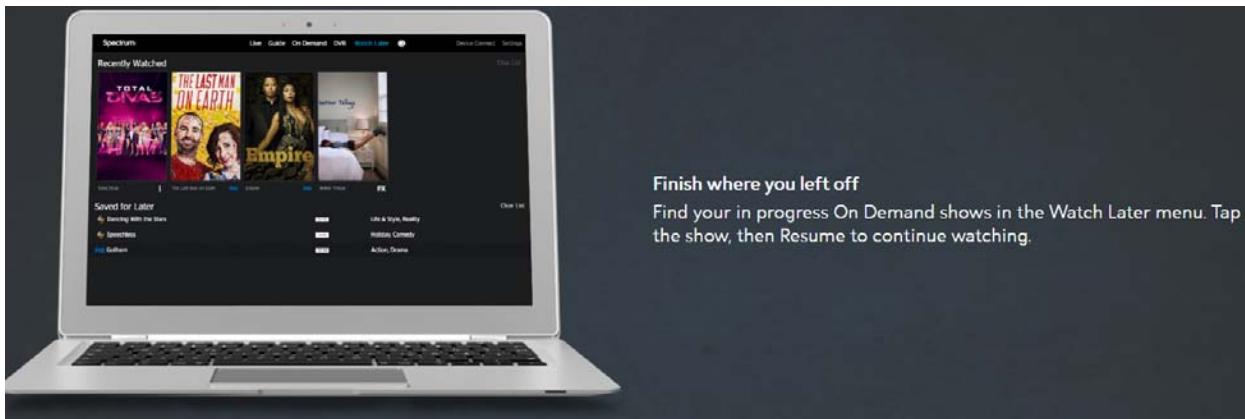
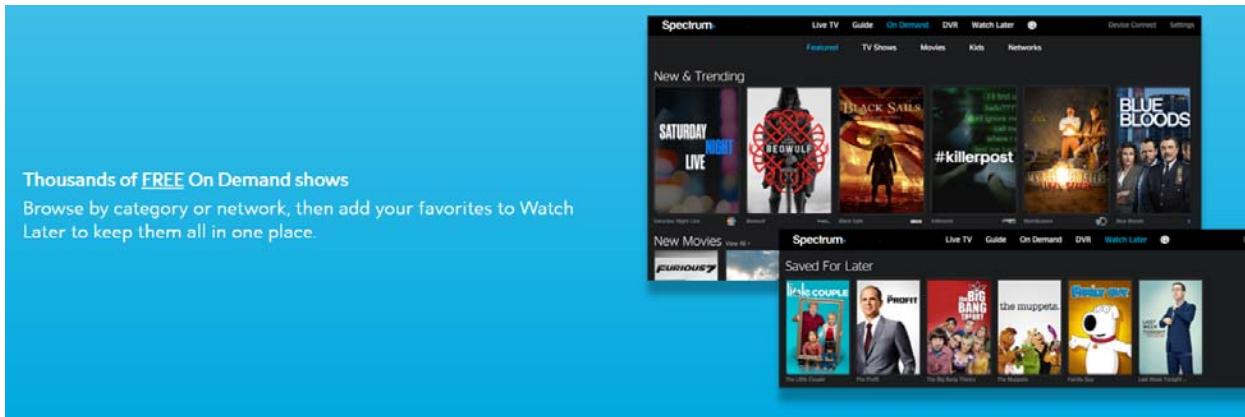
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111. On information and belief, the control screen signal and video signals or video content signals sent to the second communication system would be sent using a bandwidth (e.g., using IP or HTTP) that is less than the bandwidth used to transfer first video signals or video content signals (e.g., using MPEG 2 or MPEG 4 format) to the first communication system.

112. Each Defendant's Accused Products and Services, including its video-on-demand system, further comprise a first communication interface configured to transfer video signals or video content signals (e.g., VOD content) to a first communication system:

| Features   | At Home | On-the-Go | Roku at Home |
|--|---------|-----------|--------------|
|  Watch Live TV  | ✓       | ✓         | ✓            |
|  Stream shows and movies<br><small>On-the-go streaming is for select networks only.</small> | ✓       | ✓         |              |
|  Program Your DVR   | ✓       | ✓         |              |
|  Browse guide listings  | ✓       | ✓         | ✓            |

#### What is the Spectrum TV App?

##### **The Spectrum TV App on mobile:**

The Spectrum TV App is a mobile application that allows you to watch live TV and On Demand content at no additional charge from your mobile device. You can also tune to your DVR, schedule recordings, browse the channel guide, search for content, learn about your favorite shows and more!

##### **The Spectrum TV App on connected devices:**

The Spectrum TV App can be used with your Roku, Samsung Smart TV and Xbox One. It's an application that allows you to watch Spectrum TV in even more places in your home by using your streaming device when connected to an authorized modem. You can browse the channel guide, search for live TV content on now and up to seven days in the future, learn about your favorite shows and more!

#### What is the Send to TV feature?

You can use the Spectrum TV App to control your cable Set-Top Box. Locate the "Send to TV" icon on the app. Next, choose which cable box should receive the content. (This option is found in Settings). Naming each cable box will help ensure you select the correct one. Next, press the "Send to TV" button. If content is live, the box will tune to that specific channel and you can continue watching without interruption. If the content is On Demand, the On Demand menu screen will appear and you will need to use your remote to purchase and/or play the content.

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## Explore the Spectrum TV App

## On Demand

Select the **On Demand** icon at the bottom of the screen to browse programming. After selecting an On Demand program, you can choose **Watch on TV** to send the program to your default Spectrum Receiver.

**Note:** The next episode of an On Demand TV series will automatically play once the current one finishes. This feature is only available for select TV shows in the On Demand library.

### Watch On TV

The Watch on TV option allows you to use the Spectrum TV app to send select programming to a receiver in your home.

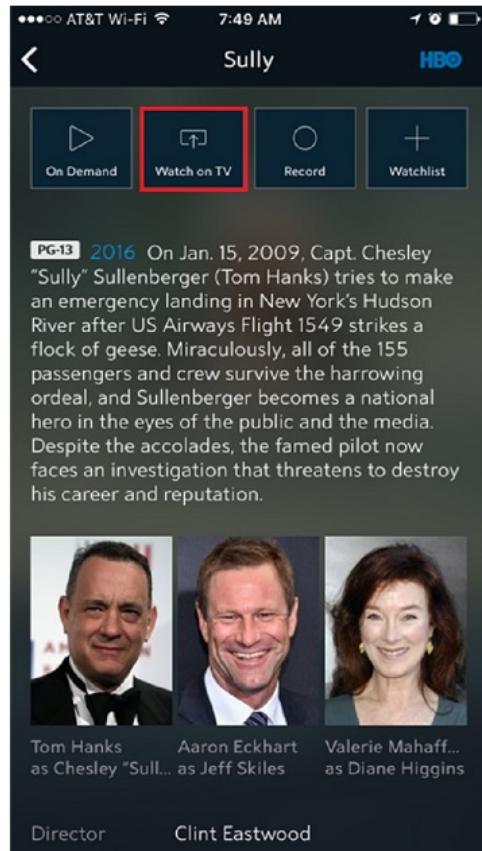
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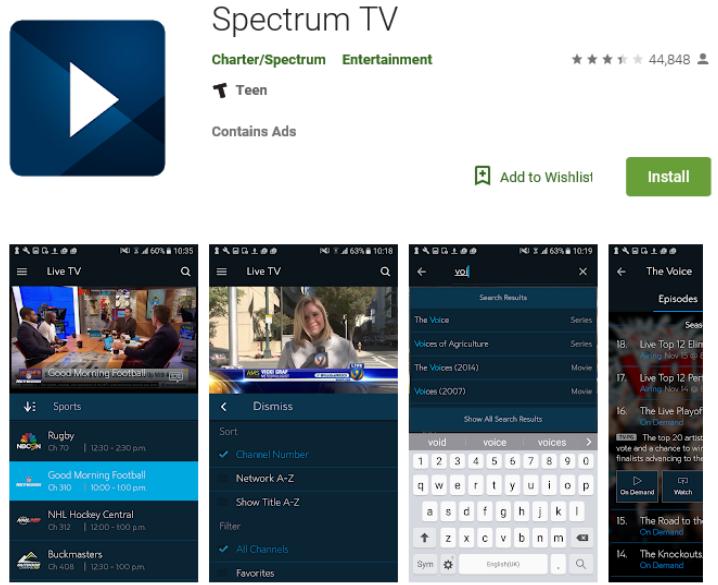


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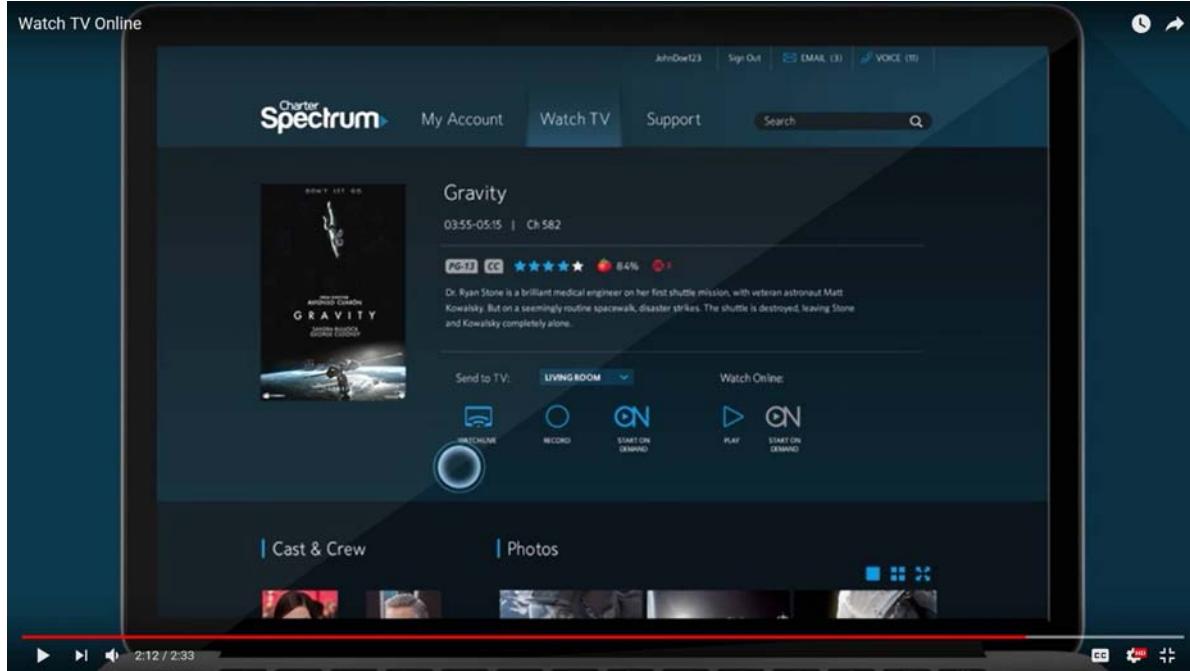
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*See* Charter's YouTube Channel, <https://www.youtube.com/watch?v=Ia3RlIfq6OU> (last accessed May 15, 2018).

113. On information and belief, each's Defendant's Accused Products and Services, including its video-on-demand system, comprise a processing system configured to transfer the control screen signal to the second communication interface, receive the video control signal from the second communication interface, implement a viewer-control selection indicated by a video control signal, and transfer video content signals or video signals to either the first communication interface or second communication interface, depending on which is indicated by the viewer control signal. *See, e.g.*, First Amended Complaint at ¶¶ 109-112.

114. Furthermore, each Defendant operates a video system, including a video system that transfers or provides streaming video content to a viewer using the Spectrum TV app, as noted above. *See, e.g.*, First Amended Complaint ¶¶ 107-110.

### The '077 Patent

115. In connection with Defendants' video service and architecture, and while using the Accused Products and Services, each Defendant operates an infringing video-on-demand system that infringes at least claim 20 of the '077 patent. Through these products and services, each Defendant enables its customers to view video-on-demand information and content using various portable devices:

| Features   | At Home | On-the-Go | Roku at Home |
|--|---------|-----------|--------------|
|  Watch Live TV  | ✓       | ✓         | ✓            |
|  Stream shows and movies<br><small>On-the-go streaming is for select networks only.</small> | ✓       | ✓         |              |
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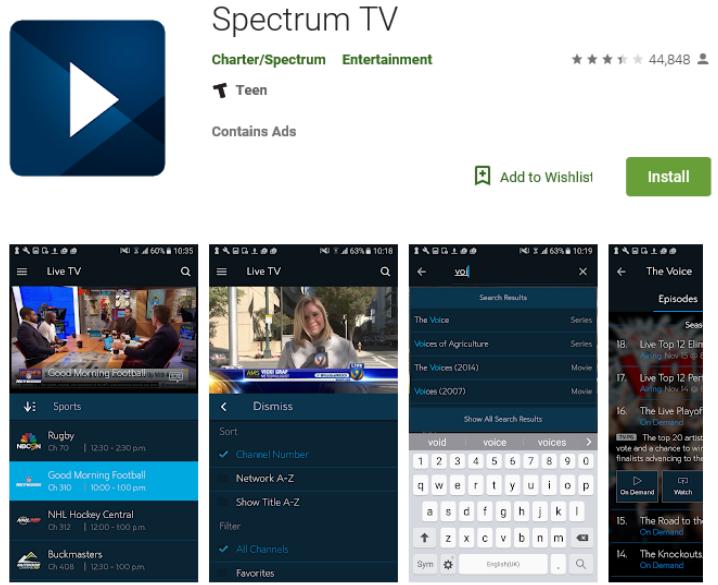
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Take your Spectrum TV experience with you! With the Spectrum TV App, you can enjoy up to 250 live TV channels and up to 30,000 On Demand TV shows and movies when you're connected to your Spectrum Internet WiFi network at home. Plus, when you're on the go, enjoy up to 150 live channels and up to 20,000 On Demand titles anywhere you have an internet connection. (See note on availability below.)

See Spectrum TV, [https://play.google.com/store/apps/details?id=com.TWCableTV&hl=en\\_US](https://play.google.com/store/apps/details?id=com.TWCableTV&hl=en_US) (last accessed May 15, 2018).



With the Charter TV App, customers now have even more choice in where and how they watch their favorite programming at no extra charge. Charter TV customers, can now watch over 130 live TV channels, browse thousands of On Demand titles and TV listings, schedule DVR recordings, get recommendations and more. The unique Kid Zone feature enables easy access to pre-approved kid-friendly content, creating a safe viewing experience for children. For sports fans, the Charter TV App Sport Zone feature gives fans instant access to scores and sports content. (Sport Zone is currently available on iOS, Android is forthcoming). Customers can even use their device as a remote to change channels on their TV. With the Charter TV App customers now have full control of their TV experience in the palm of their hands.

"We are excited to bring our customers the Charter TV App delivering greater choice and flexibility in how they watch their favorite content in their homes," said Rich DiGeronimo, Charter's senior vice president, product and strategy. "Our new Charter TV App provides a fully-interactive and user-friendly viewing experience, allowing customers to watch live TV, customize DVR recordings, and browse thousands of On Demand titles efficiently and intuitively."

**Key Charter TV App Features:**

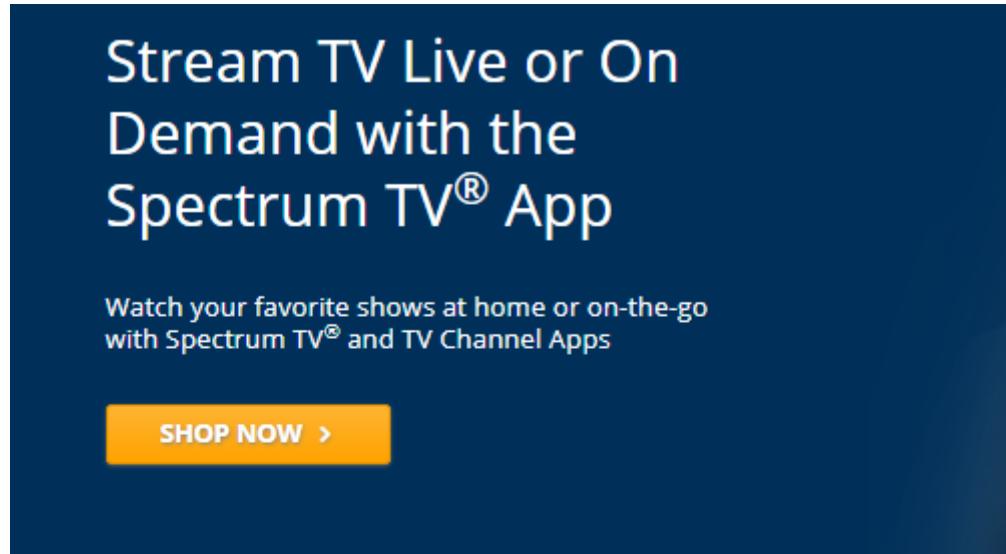
- 130+ Live TV Channels Available for In-Home Viewing
- Browse thousands of On Demand Listings
- Send To TV (Live and On Demand Listings)
- Watch Showtime channels anywhere you go with a WiFi connection (Showtime subscription required)
- Browse the Guide and search for content
- DVR Scheduling
- View TV Listings
- Kid Zone
- Sport Zone

**Requirements:**

- Charter TV
- Wi-Fi connection for streaming video
- Charter.net email address and password
- iPhone, iPad or iPod Touch running iOS 5.1 or above
- Kindle Fire (except 1st generation), including the new Kindle Fire HDX
- Android devices (Tablet and Phone) running Android 4.0 or above

*See Charter Communications, <http://phx.corporate-ir.net/phoenix.zhtml?c=112298&p=irol-newsArticle&ID=1916892> (last accessed May 15, 2018).*

116. Each Defendant provides for the operation of video streaming system. For example, Defendant's Spectrum TV App receives video from a network, such as Defendant's IP network.



## Experience the Spectrum TV App

With the Spectrum TV App, access your full TV lineup in-home and up to 30,000 On Demand TV shows and movies in your home on your mobile and connected devices, including phone, tablet and Roku, Xbox One and Samsung Smart TV.

Whether you're at home or on-the-go, the Spectrum TV App gives you access to use your device and watch thousands of our latest On Demand shows and movies – you can even use the App to program your DVR.

SHOP NOW >

*See Spectrum TV App, <https://www.spectrum.com/cable-tv/spectrum-tv-app.html> (last accessed Aug. 14, 2018).*

117. Additionally, Defendant's Spectrum TV App and/or Defendant's backend (including mid cache or edge cache tier servers) receive a network signal (e.g., video data packets) from a communications network (e.g., Defendant Internet Service) where the network signal contains a video. *See, e.g.*, First Amended Complaint ¶¶ 107-110.

## Frequently Asked Questions

### **What is the Spectrum TV App?**

#### **The Spectrum TV App on mobile:**

The Spectrum TV App is a mobile application that allows you to watch live TV and On Demand content at no additional charge from your mobile device. You can also tune to your DVR, schedule recordings, browse the channel guide, search for content, learn about your favorite shows and more!

#### **The Spectrum TV App on connected devices:**

The Spectrum TV App can be used with your Roku, Samsung Smart TV and Xbox One. It's an application that allows you to watch Spectrum TV in even more places in your home by using your streaming device when connected to an authorized modem. You can browse the channel guide, search for live TV content on now and up to seven days in the future, learn about your favorite shows and more!

### **How do I use the Spectrum TV App?**

### **How do I sign in?**

### **What devices can I use with the Spectrum TV App?**

#### **Apple Devices:**

iPad®, iPad® mini, iPhone® and iPod Touch® running iOS 9.0 or higher

You can check and update your iOS version by going to Settings > General > Software Update.

#### **Amazon Devices:**

All Kindle Fire models, including the new Kindle Fire HDX, are supported except for the first-generation Kindle Fire.

**Note:** Go to Settings > Device > About and confirm your System Version does NOT start with 6. If it starts with 6, you have the first-generation Kindle Fire.

#### **Android Devices:**

All tablets and phones running Android 4.2 (Jelly Bean) and above.

#### **Roku:**

A Roku 1, 2, 3 or 4 streaming player, Roku Express, Roku Express +, Roku Premiere, Roku Premiere +, Roku Ultra streaming players or Roku Streaming Stick (excluding first-generation Roku devices).

#### **Xbox One:**

All versions of Xbox One.

#### **Samsung Smart TV:**

Model years 2012-2018.

**Note:** Spectrum TV App on Roku, Xbox One and Samsung Smart TV is intended for in-home live streaming only, behind the Charter modem associated with the account. Performance may vary by device based on a variety of factors including age of device, firmware, individual device configuration and hardware.

What devices can I use with Spectrum TV App?

See Spectrum TV App, <https://www.spectrum.com/cable-tv/spectrum-tv-app.html> (last accessed Aug. 14, 2018).

### For Spectrum Community customers:

If your community provides Spectrum TV and internet services to all residents, you can begin watching on [SpectrumTV.com](http://SpectrumTV.com) or on the Spectrum TV App right away, just download and ensure you're connected to your property WiFi. You do not need a STB to begin watching TV. When connected to your property's WiFi you'll receive the full channel lineup provided by your property account.

The Spectrum TV App is available on:

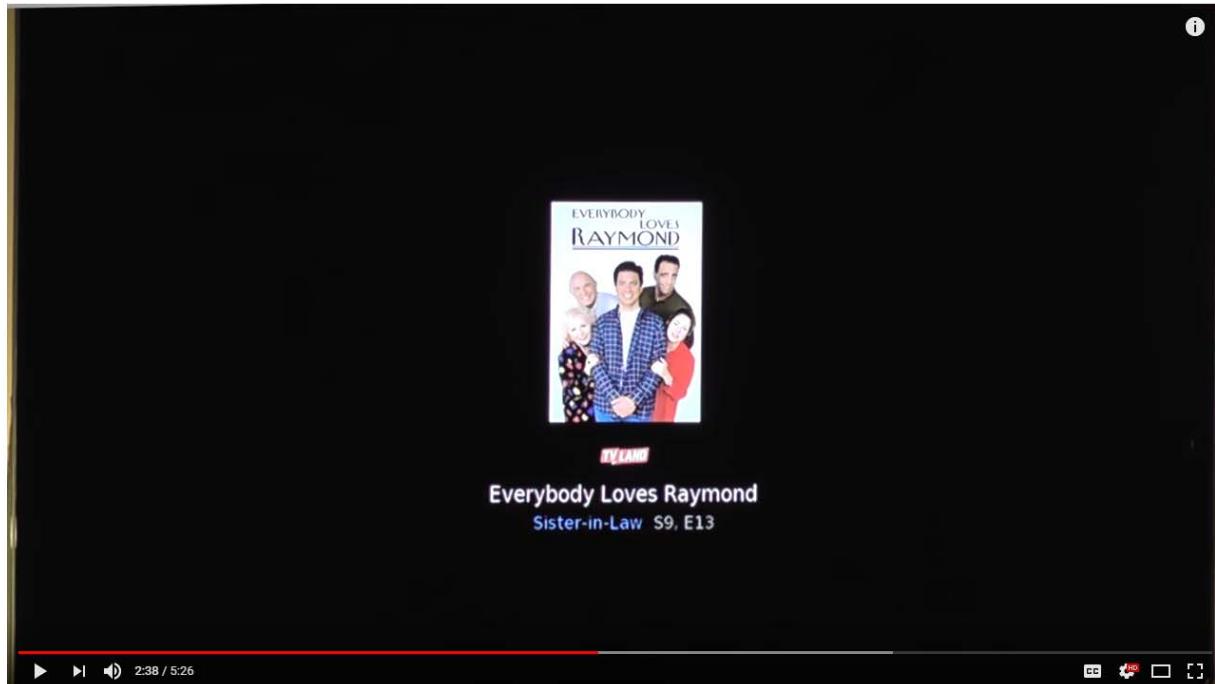
- [iOS devices](#)
- [Android devices](#)
- [SpectrumTV.com](http://SpectrumTV.com)
- [Roku](#)

*See Spectrum TV App Support, <https://www.spectrum.net/support/tv//spectrum-tv-app/> (last accessed Aug. 14, 2018).*

118. Further, Defendant's Spectrum TV Apps and/or Defendant's backend store(s) video from the network signal (e.g., video data packets) in memory.

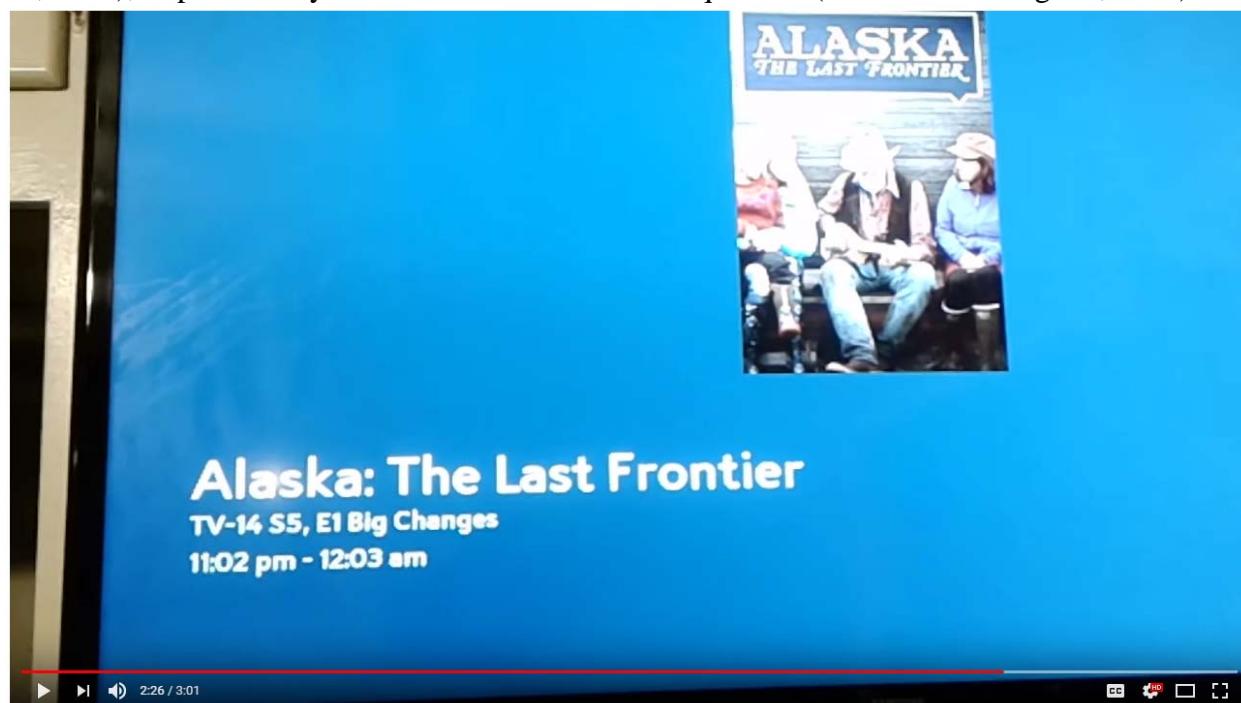


See, e.g., j guz, *How to setup the Spectrum TV App*, YouTube, at 4:31 (Mar. 15, 2018), <https://www.youtube.com/watch?v=3-m39xtweuU> (last accessed Aug. 14, 2018).



Spectrum TV Choice: Full Review

See, e.g., Home Theater Hobbyist, Spectrum TV Choice: Full Review, YouTube, at 2:28, (June 24, 2018), <https://www.youtube.com/watch?v=zu9TCqOuadw> (last accessed Aug. 14, 2018).



*See, e.g., Fintech Repair Shop, YouTube, at 2:26, (April 29, 2017),* <https://www.youtube.com/watch?v=zu9TCqOuadw> (last accessed Aug. 14, 2018).

119. For example, the Spectrum TV App, alone or in combination with Defendant's video systems, stores video in a memory buffer before displaying video. Prior to displaying a video, the Spectrum TV App will display text stating that it is "buffering."

120. In addition, on information and belief, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, determines when to initiate transfer of a video signal, including video from the memory. For example, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, will spend a certain amount of time buffering video to memory before playing the video, indicating that Defendant determines when to initiate transfer of a video signal, including video from the memory.

121. On information and belief, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, determines the rate of transfer of video from memory to a video display.

122. On information and belief, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, determines when to initiate transfer of video based on a first time period that is based on the video display rate times a first amount of video in memory. For example, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, spends differing amounts of time buffering before initiating video transfer depending on network speed and video resolution, indicating that Defendant's Spectrum TV App determines when to initiate transfer of video based on the amount of time that it takes at a certain rate to display a certain amount of stored video.

123. On further information and belief, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, determines when to initiate transfer of video based

on a first time period that is based on a second time period that is determined based on a network transfer rate time a second amount of video to be received in the network signal. For example, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, spends differing amounts of time buffering before initiating video transfer depending on network speed, video resolution, and the amount video left to play, indicating that Defendant's Spectrum TV App determines when to initiate transfer of video based on based on the amount of time necessary to receive a second amount of video from the network.

124. Further, on information and belief, the Spectrum TV App, alone or in combination with Defendant's video system, varies the timing/rate of video transfer depending on video resolution, stored video, and network speed.

## Streaming Video

### **Issue:**

Streaming not available out of home

### **Recommended Steps:**

1. Are you at home? If yes, then make sure your device is connected to your In-home WiFi network.
2. Make sure that you subscribe to Spectrum TV and Internet. If you have Spectrum TV alone, then you'll only have access to out-of-home channels.
3. Make sure the channel is available for out-of-home streaming. Make sure the channel is available for out-of-home streaming by visiting [Spectrum support](#).

### **Issue:**

Limited/insufficient bandwidth causing video stream to buffer, freeze, choppy playback

### **Recommended Steps:**

1. Are you at home? If yes, then make sure your device is connected to your In-home WiFi network and try again.
2. [Troubleshoot your WiFi network](#).
3. Restart WiFi on your device.
4. Try turning your device off and then on.
5. Uninstall and reinstall the app, then sign in and try again.
6. If you're using SpectrumTV.com, refresh your web browser and clear [temporary files, cookies and history](#).

*See* Spectrum TV App Troubleshooting, <https://www.spectrum.net/support/tv/spectrum-tv-app-troubleshooting/> (last accessed Aug. 14, 2018).

125. For example, Defendant's Spectrum TV App, alone or in combination with Defendant's video system, responds to a video slider interface, determining when to initiate the video based on user selection of a slider position the Spectrum TV app. Further, Defendant's Spectrum TV App will buffer for varying lengths of time depending on network speed, video resolution, and starting position of the video to be viewed.

126. As an example, when a first amount of video remains to be played on Defendant's Spectrum TV App, there is a certain amount of buffering that occurs before video is displayed, whereas when a second amount of video remains to be played, there is a different amount of buffering that occurs before video is displayed. More specifically, if a large portion of a video stream remains to be played there is a larger period of time before the video is transferred to the video display than if a small amount of a video remains to be played.

127. On information and belief, the timing of this buffering varies with network speed and video resolution. For example, video is transferred to a display in less time when using a higher network speed than with a lower network speed.

128. Defendant's Spectrum TV App, alone or in combination with Defendant's video system, transfers the video signal to a video display in response to determining when to initiate the transfer. For instance, after a video has been selected, and after some period of "buffering," Defendant's Spectrum TV App will begin to display the selected video. Alternatively, Defendant's backend transfers video from memory to a portable device over an Internet connection and/or to the video display of a portable device after determining when to initiate transfer. *See, e.g.*, First Amended Complaint at ¶¶ 108-112, 115-126.



See, e.g., Home Theater Hobbyist, Spectrum TV Choice: Full Review, YouTube, at 2:39, (June 24, 2018), <https://www.youtube.com/watch?v=zu9TCqOuadw> (last accessed Aug. 14, 2018).



See, e.g., Fintech Repair Shop, YouTube, at 2:28, (April 29, 2017), <https://www.youtube.com/watch?v=zu9TCqOuadw> (last accessed Aug. 14, 2018).

**COUNT 1: PATENT INFRINGEMENT**  
**(Infringement of U.S. Patent No. 6,754,907)**

129. Sprint Communications realleges and incorporates by reference the allegations set forth in First Amended Complaint Paragraphs 1–128 above.

130. Upon information and belief, each Defendant and/or one of its subsidiaries has been, and currently is, directly infringing at least claim 1 of the ‘4,907 patent by making, using, selling, and offering for sale video-on-demand systems, including the Accused Products and Services that infringe one or more claims of the ‘4,907 patent.

131. For example, Charter Communications has made, used, offered to sell, and/or has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services. *See, e.g.*, First Amended Complaint at ¶¶ 13-33, 75-80.

132. For example, upon information and belief, Charter Holdings owns and has made and/or used the infringing cable systems used to provide the Accused Products and Services. *See, e.g.*, First Amended Complaint at ¶¶ 34-40, 75-80.

133. For example, Spectrum Management has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including making, using, offering to sell, and/or selling the TWC TV and TWC TV application and owning and/or operating the infringing Time Warner Cable legacy cable systems. *See, e.g.*, First Amended Complaint at ¶¶ 64-74, 75-80.

134. For example, Charter Operating has made, used, offered to sell, and/or has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including operating network providing the Accused Products and Services and developing and offering for sale the accused “Spectrum TV” application. *See, e.g.*, First Amended Complaint at ¶¶ 41-52, 75-80.

135. For example, Time Warner Cable has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including making, using, offering to sell, and/or selling the accused TWC TV and accused TWC TV application. *See, e.g.*, First Amended Complaint at ¶¶ 54-63, 75-80.

136. For example, on information and belief, Defendant's Accused Products and Services had/have a first communication interface (e.g., interface to a cable service network) configured to transfer video content signals to a first communication system. On information and belief, Defendant's Accused Products and Services had/have a second communication interface (e.g., interface to network providing Internet service) configured to transfer the video content signals to a second communication system, transfer a control screen signal to the second communication system, and receive a video control signal from the second communication system. On information and belief, Defendant's Accused Products and Services had/have a processing system configured to transfer the control screen signal to the second communication interface, receive the video control signal from the second communication interface, implement a viewer-control selection indicated by the video control signal, and transfer the video content signals to the first communication interface if the first communication interface is indicated by the video control signal received from the second communication interface or transfer the video content signals to the second communication interface if the second communication interface is indicated by the video control signal. *See, e.g.*, First Amended Complaint at ¶¶ 108-115.

137. Upon information and belief, each Defendant's infringement of the '4,907 patent will continue unless enjoined by this Court.

138. As a direct and proximate consequence of each Defendant's infringement of the '4,907 patent, Sprint Communications has suffered and will continue to suffer irreparable injury

and damages in an amount not yet determined for which Sprint Communications is entitled to relief.

**COUNT 2: PATENT INFRINGEMENT**  
**(Infringement of U.S. Patent No. 6,757,907)**

139. Sprint Communications realleges and incorporates by reference the allegations set forth in the First Amended Complaint Paragraphs 1–138 above.

140. Upon information and belief, each Defendant and/or one of its subsidiaries has been, and currently is, directly infringing at least claim 1 the ‘7,907 patent by making, using, selling, and offering for sale video-on-demand systems, including the Accused Products and Services, that infringe one or more claims of the ‘7,907 patent.

141. For example, Charter Communications has made, used, offered to sell, and/or has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services. *See, e.g.*, First Amended Complaint at ¶¶ 13-33, 75-80.

142. For example, upon information and belief, Charter Holdings owns and has made and/or used the infringing cable systems used to provide the Accused Products and Services. *See, e.g.*, First Amended Complaint at ¶¶ 34-40, 75-80.

143. For example, Spectrum Management has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including making, using, offering to sell, and/or selling the TWC TV and TWC TV application and owning and/or operating the infringing Time Warner Cable legacy cable systems. *See, e.g.*, First Amended Complaint at ¶¶ 64-74, 75-80.

144. For example, Charter Operating has made, used, offered to sell, and/or has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including operating network providing the Accused Products

and Services and developing and offering for sale the accused “Spectrum TV” application. *See, e.g.*, First Amended Complaint at ¶¶ 41-52, 75-80.

145. For example, Time Warner Cable has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including making, using, offering to sell, and/or selling the accused TWC TV and accused TWC TV application. *See, e.g.*, First Amended Complaint at ¶¶ 54-63, 75-80.

146. For example, on information and belief, Defendant’s Accused Products and Services had/have a first communication interface (e.g., interface to a cable service network) configured to transfer first video signals to a first communication system using a first bandwidth. On information and belief, Defendant’s Accused Products and Services had/have a second communication interface (e.g., interface to network providing Internet service) configured to transfer a control screen signal and second video signals to a second communication system using a second bandwidth that is less than the first bandwidth. On further information and belief, Defendant’s Accused Products and Services had/have a processing system configured to transfer the control screen signal to the second communication interface, receive a viewer control signal from the second communication interface, and transfer the first video signals to the first communication interface if the first communication system is indicated by the viewer control signal or transfer the second video signals to the second communication interface if the second communication system is indicated by the viewer control signal. *See, e.g.*, First Amended Complaint at ¶¶ 108-115.

147. Upon information and belief, each Defendant’s infringement of the ‘7,907 patent will continue unless enjoined by this Court.

148. As a direct and proximate consequence of each Defendant's infringement of the '7,907 patent, Sprint Communications has suffered and will continue to suffer irreparable injury and damages in an amount not yet determined for which Sprint Communications is entitled to relief.

**COUNT 3: PATENT INFRINGEMENT**  
**(Infringement of U.S. Patent No. 7,559,077)**

149. Sprint Communications realleges and incorporates by reference the allegations set forth in the First Amended Complaint Paragraphs 1–148 above.

150. Upon information and belief, each Defendant and/or one of its subsidiaries has been, and currently is, directly infringing at least claim 20 the '077 patent by making, using, selling, and offering for sale video systems, including the Accused Products and Services, that infringe one or more claims of the '077 patent.

151. For example, Charter Communications has made, used, offered to sell, and/or has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services. *See, e.g.*, First Amended Complaint at ¶¶ 13-33, 75-80.

152. For example, upon information and belief, Charter Holdings owns and has made and/or used the infringing cable systems used to provide the Accused Products and Services. *See, e.g.*, First Amended Complaint at ¶¶ 34-40, 75-80.

153. For example, Spectrum Management has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including making, using, offering to sell, and/or selling the TWC TV and TWC TV application and owning and/or operating the infringing Time Warner Cable legacy cable systems. *See, e.g.*, First Amended Complaint at ¶¶ 64-74, 75-80.

154. For example, Charter Operating has made, used, offered to sell, and/or has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including operating network providing the Accused Products and Services and developing and offering for sale the accused “Spectrum TV” application. *See, e.g.*, First Amended Complaint at ¶¶ 41-52, 75-80.

155. For example, Time Warner Cable has made, used, offered to sell, and/or sold, and continues to make, use, offer to sell, and/or sells the Accused Products and Services, including making, using, offering to sell, and/or selling the accused TWC TV and accused TWC TV application. *See, e.g.*, First Amended Complaint at ¶¶ 54-63, 75-80.

156. For example, on information and belief, Defendant’s Accused Products and Services receive/received a network signal from a communication network wherein the network signal includes video. On information and belief, Defendant’s Accused Products and Services store/stored the video from the network signal in a memory. On information and belief, Defendant’s Accused Products and Services determine/determined when to initiate transfer of a video signal including the video from the memory based on a first time period and a second time period wherein the first time period is determined based on the video display rate times a first amount of the video in the memory and the second time period is determined based on a network transfer rate times a second amount of the video to be Subsequently received in the network signal. On further information and belief, Defendant’s Accused Products and Services transfer/transferred the video signal to a video display in response to determining when to initiate the transfer. *See, e.g.*, First Amended Complaint at ¶¶ 116-128. These actions are taken by Defendant directly, either acting alone or through the direction or control of Defendant customers. For instance, Defendant provides the Accused Products and Services (including the

Spectrum TV App) to its customers to view video. The Spectrum TV App is programed to execute infringing actions, and/or to encourage, direct, or control Defendant's customers to cause it to execute infringing actions. These actions of Defendant's customers are attributable to the Defendant.

157. Upon information and belief, each Defendant's infringement of the '077 patent will continue unless enjoined by this Court.

158. As a direct and proximate consequence of each Defendant's infringement of the '077 patent, Sprint Communications has suffered and will continue to suffer irreparable injury and damages in an amount not yet determined for which Sprint Communications is entitled to relief.

**PRAYER FOR RELIEF**

Wherefore, Sprint requests entry of judgment in its favor and against each Defendant as follows:

A. Enter judgment that each Defendant has directly infringed one or more claims of the Asserted Patents;

B. Enter a permanent injunction restraining and enjoining each Defendant, and their respective officers, agents, servants, employees, attorneys, and those persons in active concert or participation with each Defendant who receive actual notice of the order by personal service or otherwise, from any further sales or use of their infringing products and/or services and any other infringement of the Asserted Patents, whether direct or indirect.

C. An award of damages to compensate Sprint for each Defendant's infringement, including damages pursuant to 35 U.S.C. § 284, as well as prejudgment and post-judgment interest;

D. An award of costs and expenses in this action, including an award of Sprint's reasonable attorneys' fees pursuant to 35 U.S.C. § 285;

E. A finding that each Defendant has willfully infringed and is willfully infringing one or more claims of one or more of the Asserted Patents;

F. A finding that this is an exceptional case, award treble damages due to each Defendant's deliberate and willful conduct, and order each Defendant to pay Sprint's costs of suit and attorneys' fees; and

G. For such other and further relief as the Court may deem just, proper, and equitable under the circumstances.

**DEMAND FOR A JURY TRIAL**

Sprint respectfully demands a trial by jury on all claims and issues so triable.

Dated: August 16, 2018

Respectfully Submitted,

*Of Counsel:*

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**CERTIFICATE OF SERVICE**

I hereby certify that on this day I filed the forgoing Amended Complaint using the Court's CM/ECF electronic filing system, which will serve a copy of it by Notification of Electronic Filing (NEF) on all counsel of record.

/s/  
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